

PIONEER The Art of Entertainment

ORDER NO. CRT1455

CASSETTE CAR STEREO WITH FM/AM ELECTRONIC TUNER

KEH-380QR ..

• This additional service manual is designed to be used together with Model KEH-3200QR/UC Service Manual (CRT1426). Refer to it for finding parts numbers and adjustment, etc. which are not shown in this manual.

(EH-380QR

 \bullet The KEH-380QR/US Parts List enumerates the parts which differ from those for the KEH-3200QR/UC only.

The parts other than those enumerated in the KEH-380QR/US Parts List are indentical with those in the KEH-3200QR/UC Parts List, to which you are requested to refer, accordingly.

EXPLODED VIEW

• Parts List(Page 60)

			KEH-3200QR/UC	KEH-380QR/US			
Mark	No.	Description	Part No.	Part No.			
•	14 15 60	Button(1—6) Grille Unit Tuner Amp Assy	CAC2693 CXA4459 CWM2903	CAC2762 CXA4731 CWM3012			

PACKING METHOD

• Parts List (Page 73)

		KEH-3200QR/UC	KEH-380QR/US			
Mark No.	Description	Part No.	Part No.			
2-1 6	Carton Owner's Manual Contain Box	CHG2110 CRD1571 CHL2110	CHG2193 CRB1243 CHL2193			

2-1 Owner's Manual

Part No.	Model	Language
CRB1243	KEH-380QR/US	English
CRD1571	KEH-3200QR/UC	English, French, Spanish

ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/_S__J,RS1/_\S_\J

Chip Capacitor (except for CQS.....)
CKS....., CCS....., CSZS.....

Tuner Amp Unit	•	=====Circuit Symbol & No. Part Name======	Part No.
Consists of Tuner Amp P.C.Board Volume P.C.Board Dolby NR P.C.Board		D 460 D 461 D 501 D 901 D 902	MA700 RD4R7JSB2 RD3R0ESB2 ERC04-02F ERA15-02Y1
Unit Number : Unit Name : Tuner Amp Unit		D 954 956 958 959 960 962 963 D 961	1SS133 HZS5R6JB2
MISCELLANEOUS		D 964 D 965	MA700 RD5R1JSB2
=====Circuit Symbol & No. Part Name======	Part No.	D 967	RD8R2JSB1
IC 1 IC 251 IC 401 IC 451 IC 551	LA1883M LA3161P AN6263N NJM2068D TA8215H-A	L 1 Inductor L 2 Coil L 3 Coil L 4 Coil L 5 OSC Coil	CTF1065 CTC1022 CTC1020 CTC1056 CTC1024
IC 801 IC 951 Q 1 Q 2 Q 3	NJM2068D PD4275 3SK195 2SC2999 2SA1309A	L 6 Inductor L 201 Ferri-Inductor L 202 Ferri-Inductor L 203 Ferri-Inductor L 951 Ferri-Inductor	LAU150K LAU4R7K LAU330K CTF-161 LAU101K
Q 151 Q 152 Q 153 Q 201 Q 202	2SC2412K DTA124EK DTC114EK 2SK435 2SC1740S	T 1 Coil T 51 Coil T 201 Coil T 202 Coil T 203 204 Coil	CTC1064 CTC1071 CTB1056 CTB1008 CTB1058
Q 251 Q 401 402 Q 451 452 453 454 Q 455 456 Q 457 458	2SD1992A DTC124ES 2SC1740S DTC343TS DTC323TK	T 205 Coil T 206 Coil T 210 Coil CF 1 Ceramic Filter CF 51 52 Ceramic Filter	CTE1041 CTE1042 CTB1061 CTF-182 CTF1130
Q 459 Q 460 951 Q 502 Q 503 522 Q 551	DTA144TK UN4219 2SK330 2SC1740S DTC114EK	CF 201 Filter H 1 Surge Protector X 151 Ceramic Resonator X 951 Crystal Resonator VR 151 Semi-fixed 150k Ω (B)	CTF1085 DSP-201M CSS1066 CSS1077 VRMB6VS154
Q 801 Q 803 804 Q 911 Q 912 Q 913	DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES	$\begin{array}{cccc} \text{VR 152} & \text{Semi-fixed } 33k\Omega\left(B\right) \\ \text{VR 451} & 452 & \text{Volume } 20k\Omega\left(U\right) \\ \text{VR 453} & \text{Volume/Switch } 20k\Omega\left(B\right), 50k\Omega\left(G\right), 200\Omega \\ \text{B 951} & \text{Battery} \\ \text{LCD} \end{array}$	VRMB6VS333 CCS1164 CCS1193 CEX1012 CAW1162
Q 952	XDA124ES	RESISTORS	
D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151	1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3	R 1 3 5 R 2 R 4 159 R 6 R 8	RS1/10S223J RD1/4PS151JL RS1/10S333J RD1/4PS473JL RS1/10S563J
D 201 202 203 204 D 205 Variable Capacitance Diode D 251	1SS133 KV1235Z3 1SS133	R 9 R 10 157 160	RD1/4PS563JL RS1/10S103J
D 252 911 D 451 452 453 454 456 457 458 459 462	HZS9R1JB2 1SS133	R 13 R 14 R 15	RD1/4PS271JL RS1/10S561J RS1/10S683J

=====C	ircuit Svi	mbo! &	No. Part	Name	Part No.	_		-Circui	it Sv	mbol i	& No.	Part	Nar	118======	Part No.	ter man	====C
R 16 R 17 R 18	51 155	Pns			RS1/10S474J RS1/8S271J RS1/10S331J RS1/10S182J RS1/10S101J	 R R R	481 482								RD1/4PS222JL RD1/4PS392JL RS1/10S561J RS1/10S0R0J RS1/10S563J	0000	103 104 106 151 153
R 22 R 23 R 24 R 25 R 26					RS1/10S223J RD1/4PS472JL RD1/4PS682JL RS1/10S472J RD1/4PS103JL	R R	490 491 492 493 501	955	966						RS1/10S0R0J RS1/10S273J RS1/8S0R0J RS1/10S472J RD1/4PS472JL	CCC	155 158 159 161 162
R 27 R 28 R 52 R 53 R 54	59				RS1/10S510J RS1/10S0R0J RD1/4PS333JL RD1/4PS104JL RD1/4PS153JL	R R R R	503 504 505 551 553	506 552 554	1			٠			RD1/4PS102JL RS1/10S472J RD1/4PS152JL RS1/10S152J RS1/10S123J	000	202 203 204 205 206
R 55 R 56 R 57 R 58 R 101	102 104				RS1/10S682J RD1/4PS562JL RS1/10S473J RS1/10S513J RS1/10S133J	R R R R	555 557 561 562 801	556 558 805		560					RS1/10S471J RD1/4PS4R7JL RS1/10S102J RD1/4PS222JL RS1/10S392J	CCC	207 208 217 218 222
R 103 R 105 R 153 R 154 R 156					RS1/10S183J RS1/10S752J RD1/4PS562JL RS1/10S332J RS1/10S684J	RRRRR	802 803 807 809 901	804 808 810	811	812					RS1/10S472J RS1/10S223J RS1/10S153J RS1/10S751J RD1/2PS3R3JL	000	224 225 228 231 251
R 158 R 201 2 R 203 R 204 2 R 205	202 211 219				R\$1/10\$822J R\$1/10\$103J RD1/4P\$513JL RD1/4P\$103JL R\$1/10\$561J	R	911 912 913 914 951								RD1/4PS331JL RD1/4PS221JL RS1/10S103J RS1/10S222J RS1P151JL	CCC	253 255 256 257 261
R 210 R 220 R 221 R 222 R 223					RS1/10S473J RD1/4PS752JL RS1/10S104J RD1/4PS220JL RS1/10S472J	R R	953 956 959 960 961								RS1/10S331J RD1/4PS474JL RS1/10S223J RD1/4PS222JL RD1/4PS333JL	000	262 351 353 401 402
R 255 2 R 257 2	252 256 258 260				RS1/10S0R0J RS1/10S513J RS1/10S750J RS1/10S472J RS1/10S104J	R R R	962 963 967 969 970								RD1/4PS473JL RD1/4PS103JL RS1/10S0R0J RS1/10S2R2J RS1/8S0R0J	000	403 404 451 453 455
R 353 3					RS1/10S222J RS1/8S0R0J RS1/10S0R0J RD1/4PS102JL RD1/4PS153JL	CACCC	PACI 1 2 4 5	3 53 25	56 58						CCSQCH220J50 CKSQYF473Z50 CCSQCH330J50 CCSQTH090D50	C	457 459 461 463 468
R 401 4 R 403 R 404 R 405 R 407	102	i,			RS1/10S472J RS1/10S684J RS1/10S510J RD1/4PS103JL RS1/10S0R0J	0 0000	6 7 8 9	22	51	54	59	105 1	54		CCSQTH070D50 CKSQYB222K50 CKSQYB223K50 CCSQTH150J50 CCSQSL271J50	00000	473 475
	52 479 54 465	466			RS1/10S473J RS1/10S331J RD1/4PS182JL RS1/10S182J RD1/4PS222JL	0 0000	11 12 13 14 15	19 24	101	164	201	502			CKSQYB103K25 CCSQCH470J50 CEA3R3M25LS CKSQYB102K50 CCSQCH080D50		551 553 555
R 459 4 R 461 4 R 463 4	77 478 60 62 64 68				RS1/10S222J RS1/10S333J RS1/10S474J RS1/8S122J RD1/4PS433JL	0 0000	16 17 18 20 21								CCSQCH100D50 CCSQCH330J50 CCSQCH150J50 CKSQYF104Z25 CKSYB393K25	C	561 562 801 803 805
					RS1/10S102J RS1/10S123J RS1/10S332J RS1/10S183J RD1/4PS104JL	0 0000	27 55 57 61 102	52							CKSYB393K25 CEA101M10LS CEA010M50LS2 CEAR47M50LS2 CKSYB473K50 CEA470M16LS	0 9	807 901 902 903 911

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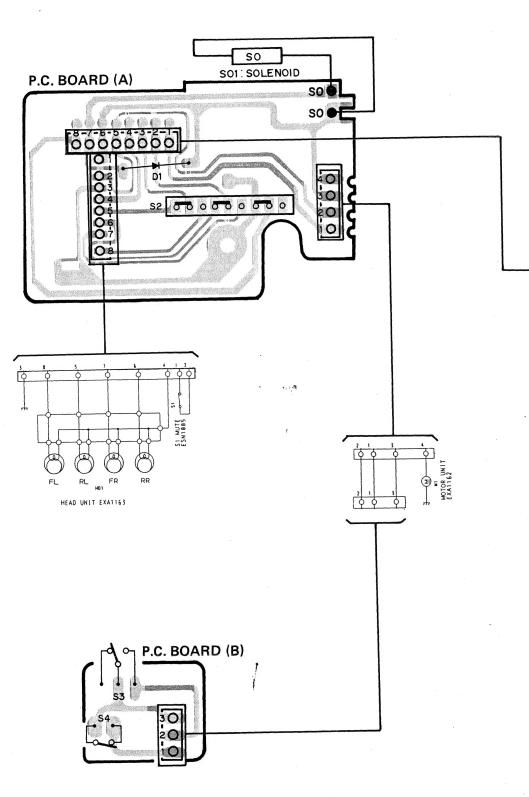
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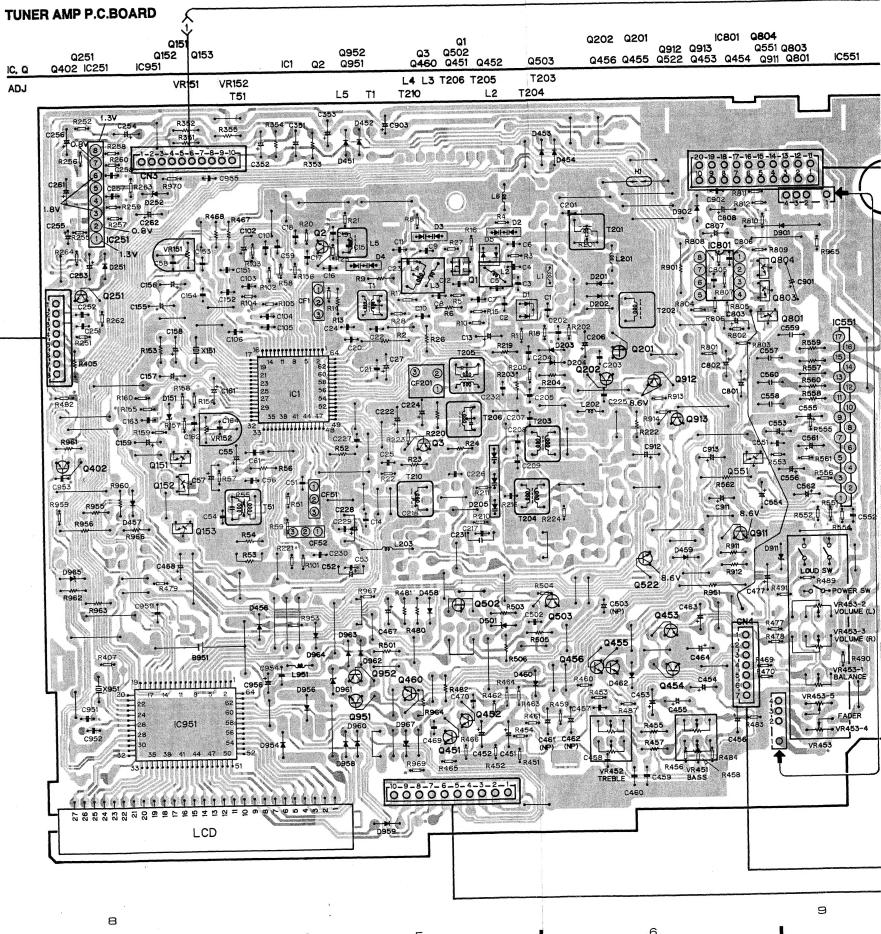


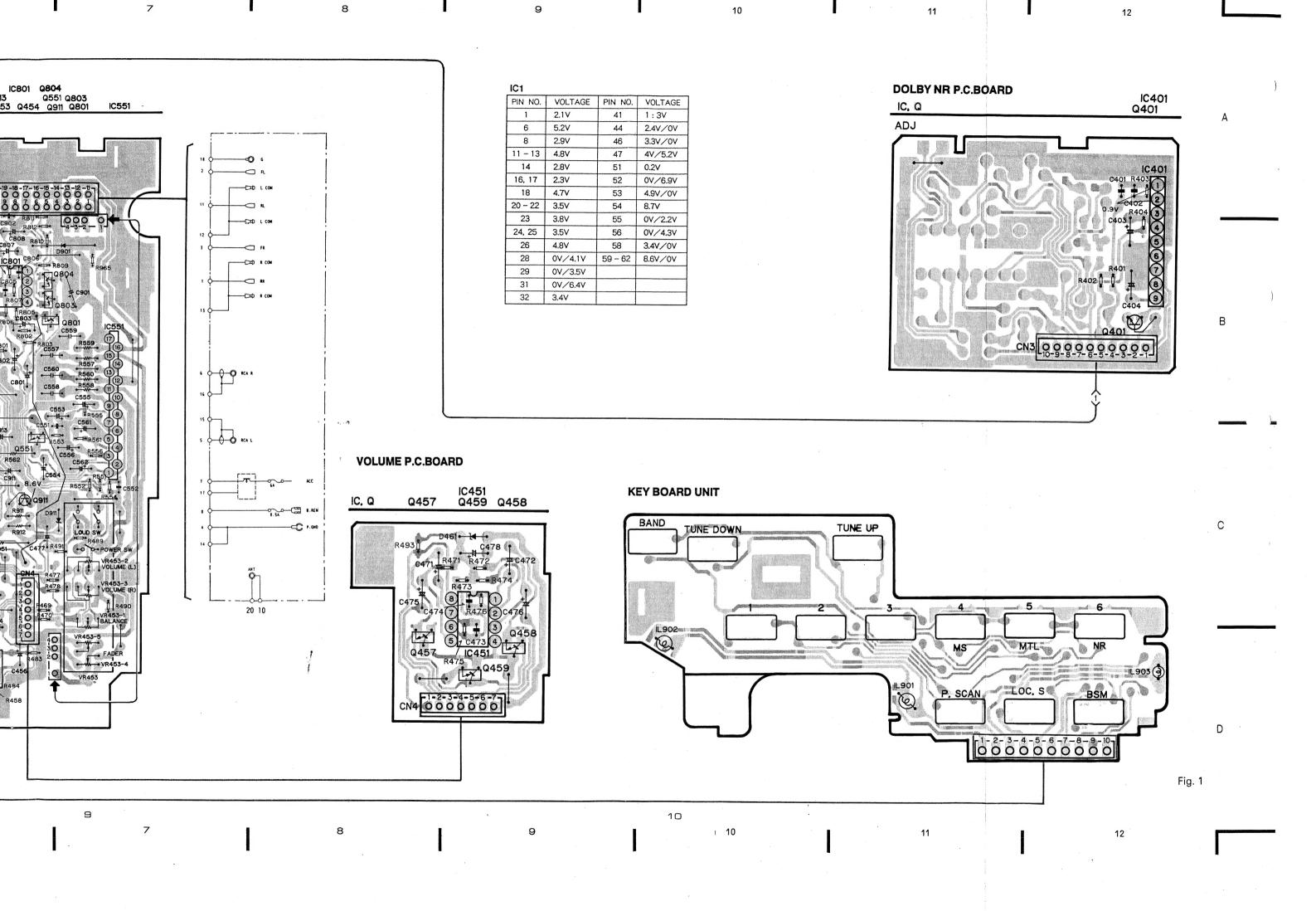
	Part No.	****	Circui	t Syn	nbol &	No. P	art	Name====	=	Part No.	====	===Circuit	Symbol 8	& No	o. Part	Na	ame=====	Part No.	
	RD1/4PS222JL RD1/4PS392JL RS1/10S561J RS1/10S0R0J RS1/10S563J	C 103 C 104 C 106 C 151 C 153	152							CKSQYB182K50 CKSQYB682K50 CKSQYB222K50 CKSQYB223K50 CKSQYB332K50	C 9	12 51 952 53 54 55						CEA101M CCSQCH CKSQYF4 CKSYB47 CKSQYB2	73Z50 3K50
	RS1/10S0R0J RS1/10S273J RS1/8S0R0J RS1/10S472J RD1/4PS472JL	C 158 C 159 C 161		157				٠		CEA010M50LS2 CEAR22M50LS2 CEA0R1M50LS2 CEA100M16LS2 CKSQYB152K50		59 Number						CEA331M CKSYB22	
9	RD1/4PS102JL RS1/10S472J RD1/4PS152JL RS1/10S152J RS1/10S123J			227	229	230				CKSQYB222K50 CCSQCH220J50 CKSQYB223K50 CKSQYF473Z50 CEA470M16LS	IL 9 IL 9		: Key Boa	L	Jnit amp 14 amp 14			CEL1191 CEL1169	
э	RS1/10S471J RD1/4PS4R7JL RS1/10S102J RD1/4PS222JL RS1/10S392J	C 207 C 208 C 217 C 218 C 222					•			CCSQTH090D50 CCSQCH010C50 CCSQRH82OJ50 CCSQUJ180J50 CEAR47M50LS2		Number Name 2 1	: : P.C.Boa		\) witch(F	WD/RE	EV)	ESH1003 1SR-35-10	0 A
	RS1/10S472J RS1/10S223J RS1/10S153J RS1/10S751J RD1/2PS3R3JL	C 228 C 231	232				,			CEA3R3M25LS CKSQYB473K25 CEA220M16LS CQPA431G2A CKSQYB821K50		Number Name 3 4	: : P.C.Boa	S	b) witch(T/ witch(M		UN)	ESH1004 CSN1005	
	RD1/4PS331JL RD1/4PS221JL RS1/10S103J RS1/10S222J RS1P151JL	C 255 C 256	254 258							CEA2R2M50LS2 CEA470M10LS CEA470M10L2 CKSQYB333K50 CEA221M10L2	S M	ellaneous I	Parts List	M	witch(M lotor Un	it		ESN1005 EXA1162	
٠	RS1/10S331J RD1/4PS474JL RS1/10S223J RD1/4PS222JL RD1/4PS333JL	C 262 C 351 C 353 C 401 C 402	352							CEA101M10L2 CEA100M16L2 CEA4R7M35L2 CKSQYB103K25 CCSQCH330J50		1			ead Ass olenoid	зу		EXA1163 EXP1010	
	RD1/4PS473JL RD1/4PS103JL RS1/10S0R0J RS1/10S2R2J RS1/8S0R0J	C 403 C 404 C 451 C 453 C 455		467	477					CEA330M10LS CEA0R1M50LS2 CEA100M16LS2 CEA0R1M50LS2 CEAR47M50LS2									
	CCSQCH220J50 CKSQYF473Z50 CCSQCH330J50 CCSQTH090D50	C 459 C 461	458 460 462 464					٠		CKSQYB153K50 CKSYB393K25 CEALNP2R2M35 CEAR22M50L2 CEA010M50LS2									
	CCSQTH070D50 CKSQYB222K50 CKSQYB223K50 CCSQTH150J50 CCSQSL271J50	C 471 C 473	470 472 474 476		i.					CCSQCH330J50 CEA4R7M35LS CCSQCH101J50 CEA2R2M50LS2 CEA470M10L2									
	CKSQYB103K25 CCSQCH470J50 CEA3R3M25LS CKSQYB102K50 CCSQCH080D50		554 556	559	560	4.7 μ	F/16 V			CCH1005 CKSQYB102K50 CEHAQ4R7M50 CEHAQ470M25 CFTNA224J50									
a	CCSQCH100D50 CCSQCH330J50 CCSQCH150J50 CKSQYF104Z25 CKSYB393K25	C 803	802 806							CÉHAQ220M50 CEHAQ101M10 CEA2R2M50LS2 CEA470M10L2 CCSQCH101J50									
Э	CKSYB393K25 CKSYB393K25 CEA101M10LS CEA010M50LS2 CEAR47M50LS2 CKSYB473K50 CEA470M16LS	C 901 C 902 C 903	913			330 µ	F/10V			CEA100M16LS2 CEHAQ472M16 CKSQYF473Z50 CEA102M16L2 CCH1128									

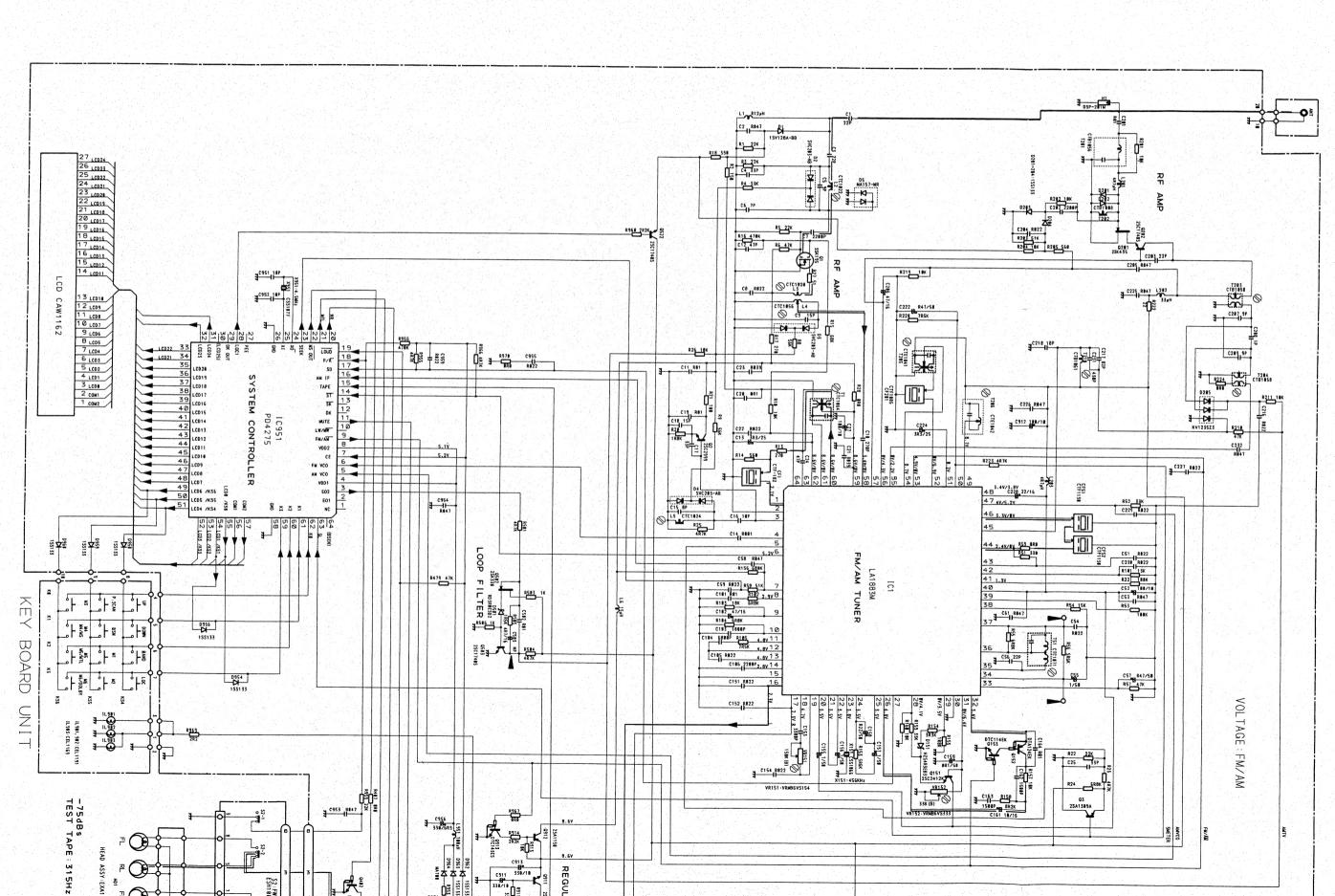
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CONNECTION DIAGRAM



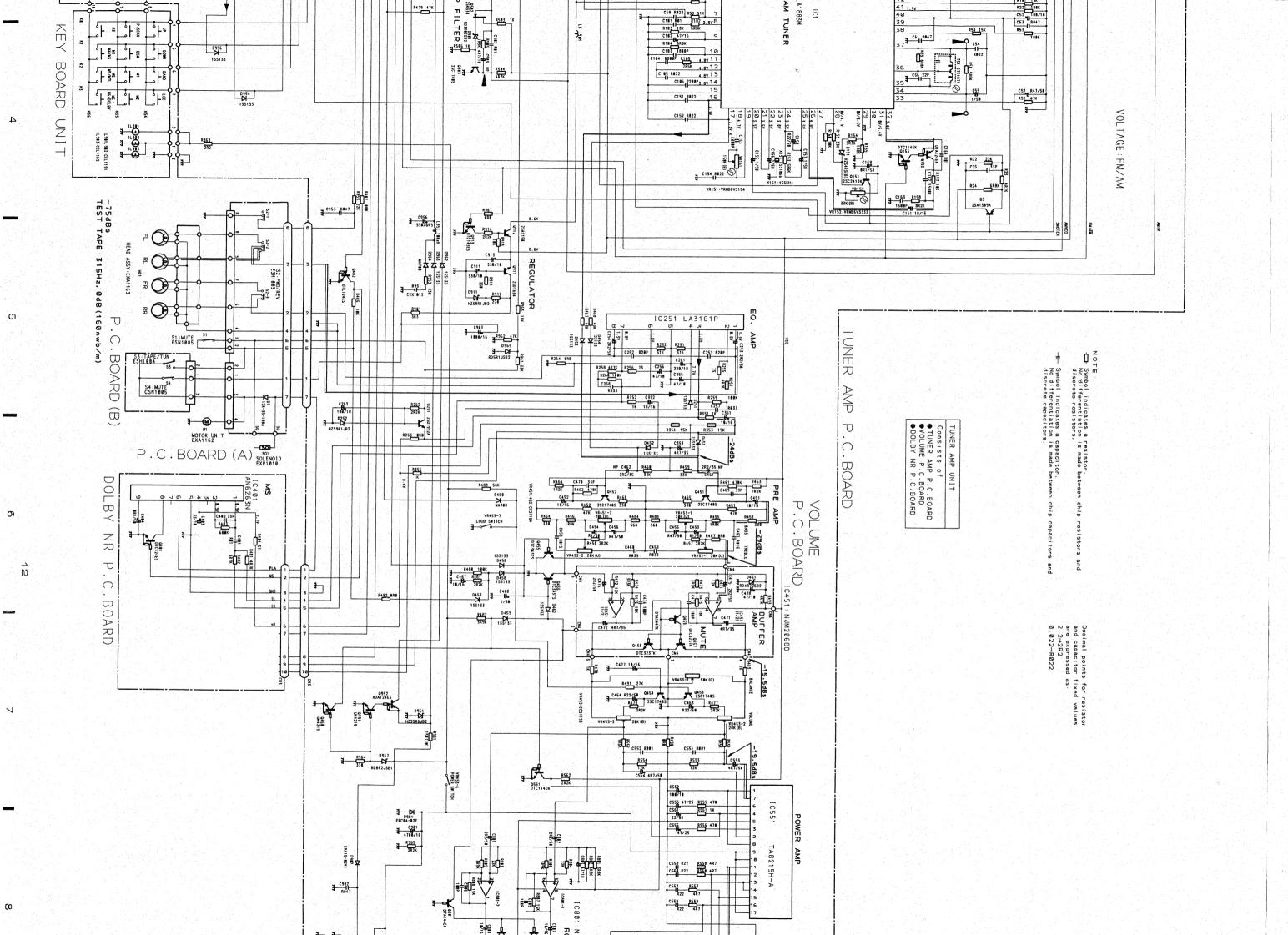






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Picizes | Res 338/18 25 D911 R912 HZ59R1JB2 228 # **O** # **()** R981 IC251 LA3161P TUNER S1:MUTE ESN1005 NOTE:

Symbol indicates a resistor.
No differentiation is made between discrete resistors. -II- Symbol indicates a capacitor. No differentiation is made betwee discrete capacitors. AMP C262 188718 D252 HZS9R1JB2 282k 251 2501992A TUNER AMP UNIT

Consists of

TUNER AMP P.C.BOARD

VOLUME P.C.BOARD

DOLBY NR P.C.BOARD MOTOR UNIT U C.BOARD P.C.BOARD (A) SOLENOID EXPENSIVE EXPLICIT. R489 56K

D468

MA788 MS IC401 AN626 VOLUME P.C.BOARD 13 Car C402 33P 155135 0456 1860 187, 6481 187, 6481 187, 6481 10457 10457 10457 10457 10457 10458 1 9456 01C345TS 0462 15S143 1 R491 27K

C464 822/58 0454

R472 25C17485 R554 120 C554 487 338 RD8R2JSB C562 188718 C555 41/25 R555 478 C561 R561 1K 22/58 10551 D981 ERC84-82F C981 4788/16 C556 R556 470 287.750 R883 3 R965 AMP D982 C557 R557 R22 4R7 C559 R559 3 C982 R847 IC801:NJM2068D RCA PREOUT 0883 DTC323TK 20.5dB₃ L com ₿ D Δ 20 22 COM

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DOLBY

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The Art of Entertainment

KEH-3200QR/UC



ORDER NO. CRT1426

CASSETTE CAR STEREO WITH FM/AM ELECTRONIC TUNER

KEH-3200QR (C) KEH-2200QR (S) KEH-3250QR (S) KEH-2250QR (S) KEH-1250 (S)

Note:

• See the separate manual CX-197 (CRT1328) for the cassette mechanism description.

• Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Whenever a cord assembly may be used for repairing, do not fail to employ the cord assembly designed for the related part.

Do not apply any cord assembly designed for a different part.

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PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A. PIONEER ELECTRONICS OF CANADA, INC. 505 Cochrane Drive, Markham, Ontario L3R 8E3 Canada PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911 © PIONEER ELECTRONIC CORPORATION 1991



SAFETY INFORMATION (UC MODEL)

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5). When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

1. SPECIFICATIONS

KEH-3200QR, KEH-2200QR

General Power source Grounding system . Max. current consur Dimensions (chassis	nption ;)	14.4 V DC (10	.8 - 15.6 V allo Negati × 50(H) × 141 × 2(H) × 5-1/2	owable) ive type 7.0 A (D) mm 2(D) in.]
(nose)) × 58(H) × 16 2-1/4(H) × 5/1	(D) mm 8(D) in.]
lan accept	ing bracket)	1820W1 X	57/HI X 157 5	uu mm
Amplifiar				
Continuous power driven 50 to 15,000	output is 10 W per ch Hz with no more than ! stput	5% THD.	/ × 2/15 W/ ×	A (FIA I)
Load impedance	Impedance	4	Ω (4 – 8 Ω alie	0Wable)
Tone controls (bass)	e)		±10 dB	(100 Hz) (10 kHz)
		+8 dB (100	Hz) (volume: -	-30 dB)
Tape player Tape Tape speed Tape speed Tape speed Fast forward/rewind Wow & flutter Frequency response	4.76cm d time 4.76cm (KEH-3200QR) (KEH-2200QR)	Compact casse //sec. (+0.14cm/ Api Api Metal: 4	tte tape (C-30 'sec., - 0.05cr brox. 100 sec. 1 0.13% (0 - 17,000 Hz 0 - 14,000 Hz	 C-90) Sec.) for C-60 (WRMS) (±3 dB) (±3 dB)
Stereo separation Signal-to-noise ratio) DA-	el. Delle, PAID IN.		. 45 dB
(KEH-3200QR)	Met	Dolby NR OUT:	55 dB (IHF-A n	etwork)
Frequency range Usable sensitivity 50 dB quieting sens Signal-to-noise ratio Distortion Frequency response Stereo separation	itivity	0.3% (at	65 dBf, 1 kHz, 0 15,000 Hz dB (at 65 dBf	stereo) (±3 dB) f, 1 kHz)
	odulation (desire signa	0 dBf (two undesire 5 dBf (two undesire	signal level: signal level:	110 dBf) 110 dBf)
AM tuner Frequency range Usable sensitivity Selectivity		18 μ	530 - 1 / (25 dB) (S/N 50 dB (±	,710 kHz : 20 dB) -10 kHz)
			aardanaa with	coorifi

These specifications were determined and are presented in accordance with specification standards established by the Ad Hoc Committee of Car Stereo Manufacturers.

Note: Specifications and the design are subject to possible modification without notice due to improvements.

KEH-3250QR, KEH-2250QR

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
General 14.4 V DC (10.8 - 15.6 V allowable) Power source Negative type Grounding system Negative type Max. current consumption 7.0 A Dimensions (chassis) 178(W) × 50(H) × 141(D) mm (nose) 188(W) × 58(H) × 16(D) mm (mounting bracket) 182(W) × 52(H) × 152.5(D) mm Weight 1.4 kg
$ \begin{array}{llllllllllllllllllllllllllllllllllll$
Compact cassette tape (C-30 - C-90)
Signaf-to-noise ratio (KEH-3250QR) Metal: Dolby B NR IN: 63 dB (IEC-A network) Dolby NR OUT: 55 dB (IEC-A network) (KEH-2250QR) 52 dB (IEC-A network)
FM tuner
Frequency range 87.5 − 108 MHz Usable sensitivity 11 dBf (1.0 μV/75 Ω, mono, S/N: 30 dB) 50 dB quieting sensitivity 16 dBf (1.7 μV/75 Ω, mono) Signal-to-noise ratio 70 dB (IECA networt) Distortion 0.3% (at 65 dBf, 12 kHz, stereo) Frequency response 30 − 15,000 Hz (±3 dB) Stereo separation 40 dB (at 65 dBf, 1 kHz) AM tuner
Frequency range 531 - 1.602 kHz (9 kHz)
530 - 1,710 kHz (10 kHz) Usable sensitivity

Note: Specifications and the design are subject to possible modification without notice due to improvements.



► KEH-1250

General

Power source	14.4 V DC (10.8 – 15.6 V allowable)
Grounding system	Negative type
Max. current consumption	7.0 A
Dimensions (chassis)	178(W) × 50(H) × 147.5(D) mm
(nose)	170(W) × 46(H) × 12(D) mm
(11000) 11111111111111111111111111111111	1.3 kg
weight	
Amplifier	
Continuous power output is 10	W per channel min. into 4 ohms,
both channels driven 50 to 15,0	00 Hz with no more than 5% THD.
Maximum nower output	
Cantinuous power output	
Continuous pover output	4 Ω (4 – 8 Ω allowable)
Load impedance	+8 dB (100 Hz)
Loudness contour	+8 dB (100 Hz) (volume: −30 dB)
	(Volume: —30 db)
Tape player	
Tana	Compact cassette tape (C-30 - C-90)
Tana speed 4.76cm/s	ec. (+0.14cm/sec., -0.05cm/sec.)
Tape speed	Approx. 100 sec. for C-60
Fast forward/rewilld time	0.13% (WRMS)
Wow & flutter	
Frequency response	40 — 14,000 Hz (±3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	52 dB (IEC-A network)

A A V DO (40.0 AE G V allowable)

FM tuner	FM tune
Frequency range	Frequenc
Usable sensitivity	Usable s
50 dB quieting sensitivity 16 dBf (1.7 μ V/75 Ω , mono)	50 dB qu
Signal-to-noise ratio	Signal-to
Distortion	Distortio
Frequency response	Frequenc
Stereo separation	Stereo s
AM tuner	
Frequency range 531 — 1,602 kHz (9 kHz)	
530 — 1,710 kHz (10 kHz)	Tioquoii
Usable sensitivity	Heahla s
Selectivity	Solectivi
50 dB (+10 kHz)	Selectivi

Note

Specifications and the design are subject to possible modification without notice due to improvements.

Features

KEH-3200QR, KEH-2200QR

- Built-in highly sensitive "Super Tuner" for automatic control of stereo separation, muting and frequency characteristics to match the strength of the FM signal.
- The Best Stations Memory automatically memorizes the six best (strongest) stations in the six preset buttons in the order of their strength.
- Preset scan tuning for sequential recall of preset frequencies.
- Auto reverse function eliminates the need to turn the cassette over and allows uninterrupted playback.
- Built-in Dolby B NR for reduced tape hiss. (This feature is provided for the KEH-3200QR.)
- Music search function allows automatic playback from the beginning of the selection being played or the beginning of the next selection.

(This feature is provided for the KEH-3200QR.)

- 25 W × 2 maximum output for sound with power to spare. Combination with separately available power amp unit allows configuration of a powerful 4-speaker system.
- The "Quick Release Mounting Bracket", facilitates mounting and dismounting of the car stereo and serves to protect the unit from theft.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
 "DOLBY" and the double-D symbol □□ are trademarks of Dolby Laboratories Licensing Corporation.

• KEH-3250QR, KEH-2250QR

- Built-in highly sensitive "Super Tuner" for automatic control of stereo separation, muting and frequency characteristics to match the strength of the FM signal.
- The Best Stations Memory automatically memorizes the six best (strongest) stations in the six preset buttons in the order of their strength.
- Preset scan tuning for sequential recall of preset frequencies.
- Auto reverse function eliminates the need to turn the cassette over and allows uninterrupted playback.

- Built-in Dolby B NR for reduced tape hiss. (This feature is provided for the KEH-3250QR.)
- Music search function allows automatic playback from the beginning of the selection being played or the beginning of the next selection.

(This feature is provided for the KEH-3250QR.)

- 25 W × 2 maximum output for sound with power to spare. Combination with separately available power amp unit allows configuration of a powerful 4-speaker system.
 (This feature is provided for the KEH-3250QR.)
- The "Quick Release Mounting Bracket", facilitates mounting and dismounting of the car stereo and serves to protect the unit from theft.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
 "DOLBY" and the double-D symbol III are trademarks of Dolby Laboratories Licensing Corporation.

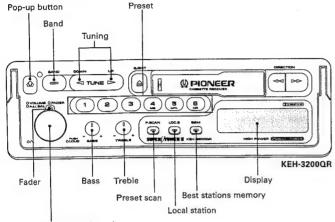
KEH-1250

- Built-in highly sensitive "Super Tuner" for automatic control of stereo separation, muting and frequency characteristics to match the strength of the FM signal.
- The Best Stations Memory automatically memorizes the six best (strongest) stations in the six preset buttons in the order of their strength.
- Preset scan tuning for sequential recall of preset frequencies.
- Auto reverse function eliminates the need to turn the cassette over and allows uninterrupted playback.
- Choice of either 4-speaker or 2-speaker system is possible. When
 the 4-speaker system (15 W × 4) is used, volume of front and rear
 speakers can be adjusted independently, for optimum sound balance. The 2-speaker system (25 W × 2) provides more than
 enough power for clear, high-fidelity playback.

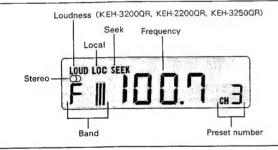


2. USING THE RADIO

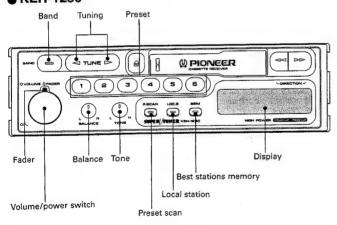
• KEH-3200QR, KEH-2200QR, KEH-3250QR, KEH-2250QR

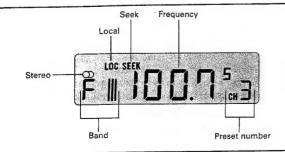


Volume/balance/loudness/ power switch (KEH-3200QR, KEH-2200QR, KEH-3250QR) Volume/balance/power switch (KEH-2250QR)



■ KEH-1250





• Before attempting operation...

- · Set the fader control to the upright position.
- Turning the power switch to the right causes power to switch ON and the current frequency to appear on the display.
- Since the set is designed preferentially for tape play, eject a cassette tape, if mounted, before operating the radio.
- 2. Press the band switch to select the band.
- Press both ends of tuning button and the seek tuning indicator will appear on the display.
- Press either the left or right side of the tuning button to tune in the desired frequency. (Pressing the right side will increase the frequency.)
- Adjust the volume and balance. To adjust the balance, first pull the knob until a click is heard. After setting to the desired level, push the knob in again to its original position.
- 6. Adjust the tone.

• To enter a frequency into the preset memory...

 Hold down one of the preset buttons (1-6) for approximately two seconds. The frequency is stored in memory (assigned to the preset button pressed) once the preset number stops flashing on the display.

Six FM1 frequencies, six FM2 frequencies, six FM3 frequencies and six AM frequencies can be entered.

• Best Stations Memory Button

Automatically tunes strong frequencies and assigns them to preset buttons 1 through 6 for one-touch automatic tuning. The best stations memory function is activated by pressing this button for approximately 2 seconds. The best stations memory function is indicated by ——— flashing on the display, and this function can be canceled by pressing the band switch. The frequency display returns once the best stations memory function is complete. The frequency displayed at this time is of the strongest station assigned to preset button 1 by the best stations memory function.

- 6 best (strongest) frequencies are memorized in the 6 preset buttons in the order of their strength, the strongest one being assigned to preset button 1.
- The frequencies previously assigned to the preset buttons are retained when 6 frequencies cannot be located.
- The best stations memory is in operation while ——— is flashing on the display.

Local Station Switch

Pressing this switch increases the seek threshold level so that only relatively strong stations can be tuned in (local indicator will illuminate on the display). Local seek threshold level can be selected among four levels for FM and two levels for AM.

Holding this switch down for approximately 2 seconds and then pressing the right side of the tuning button changes the display from L-1, L-2, L-3 to L-4. Pressing the left side of the tuning button changes the display from L-4, L-3, L-2 to L-1 (L-1 and L-2 for AM). The bigger the number, the higher the seek threshold becomes and only relatively strong stations can be tuned in.



• Fader Control

This control is used to adjust the balance between the front and rear speakers when using a 4-speaker system. Turning the control to the right decreases the volume of the rear speakers, while turning it to the left decreases the volume of the front speakers. With 2-speaker systems, set this control to the upright position.

A considerable amount of sound will continue to be produced from speakers of a 4-speaker system which have been cut by setting the fader control either to the front speakers or rear speakers. This is normal and does not indicate malfunction.

Important (KEH-3200QR, KEH-2200QR, KEH-3250QR)

The output of power amp. (sold separately) is not affected by fader control when this unit is linked with the power amp.

• Loudness Switch (KEH-3200QR, KEH-2200QR, KEH-3250QR) When playing back a tape or listening to the radio at low volume, the low tone is emphasized and more clearly heard by pressing this switch

Auto-Loudness (KEH-2250QR, KEH-1250)

When playing back a tape or listening to the radio at low volume, the low tone is automatically emphasized.

Seek Tuning

Press both ends of tuning button and tuning to the next higher or lower broadcast on the band can be accomplished automatically by simply pressing either the right or left side of the tuning button. FM frequencies change in 0.2 MHz steps while those in the AM band change in 10 kHz steps. (KEH-3200QR, KEH-2200QR)

FM frequencies change in 50 kHz steps while those in the AM band change in 9 kHz steps.(KEH-3250QR, KEH-2250QR, KEH-1250)

AM frequencies are tuned in 10 kHz steps after the tuning steps are changed.

Preset Scan Tuning

Pressing the preset scan button (CH indicator flashes) causes previously stored frequencies to be tuned in sequentially for eight seconds each. Press again when the desired frequency is tuned in to cancel preset scan tuning.

Preset Tuning

Pressing the preset button instantly tunes in the frequency programmed in the memory for that button.

Manual Tuning

When manual tuning is employed, FM frequencies change in 0.2 MHz steps while AM frequencies change in 10 kHz steps. (KEH-3200QR, KEH-2200QR)

When manual tuning is employed, FM frequencies change in 50 kHz steps while AM frequencies change in 9 kHz steps. (KEH-3250QR, KEH-2250QR, KEH-1250)

- AM frequencies are tuned in 10 kHz steps after the tuning steps are changed.
- Press both ends of tuning button and the seek tuning indicator will disappear from the display.
- Change the frequency by pressing either the left or right side of the tuning button. Pressing the button once will change the frequency one step (see above). Continuously depressing either side of the button will successively change the frequency at the prescribed step.

● Pop-up button (KEH-3200QR, KEH-2200QR, KEH-3250QR, KEH-2250QR)

When the quickrelease handle is on the bottom, push the button to move it up slightly. Push it when you remove the unit from the dashboard

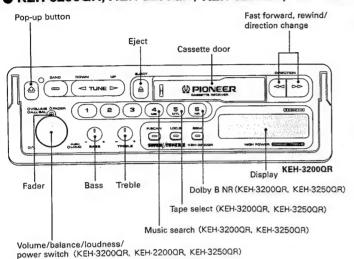
The button works only when the handle lock is released.

Before removing this unit from your vehicle, be sure to remove cassette tapes and make sure that radio power is switched OFF.



3. USING THE TAPE DECK

● KEH-3200QR, KEH-2200QR, KEH-3250QR, KEH-2250QR

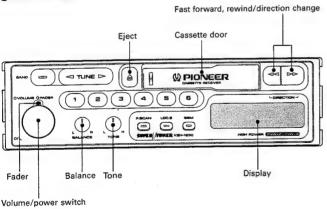


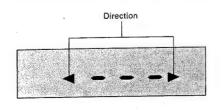
Music search (KEH-3200QR, KEH-3250QR) Loudness (KEH-3200QR, KEH-2200QR KEH-32500R) LOUD MIL nn

Volume/balance/power switch (KEH-2250QR)

Metal (KEH-3200QR, KEH-3250QR) Dolby B NR (KEH-3200QR, KEH-3250QR)

KEH-1250





• Before attempting operation...

- · Set the fader control to the upright position.
- Turning the power switch to the right causes power to switch ON.
- Loading a cassette tape into the load slot causes playback to begin automatically.
- 3. Adjust the volume and balance. To adjust the balance, first pull the knob until a click is heard. After setting to the desired level, push the knob in again to its original position.
- 4. Adjust the tone.
- 5. When tape playback reaches the end of the tape, playback will automatically switch from the side being played to the opposite side (ie. Side A to Side B or vice versa) (Auto-reverse). To eject the tape during playback, press the eject button.
- A loose or warped label on a cassette tape may interfece with the eject mechanism of the unit or cause the cassette to become jammed in the unit. Avoid using such tapes or remove such labels from the cassette before attempting use.
- Do not try to eject the cassette immediately after insertion, as it will cause malfunction. Wait a few seconds.
- Loose tapes should be rewound with the aid of a pencil and unevenly wound tapes rewound with the use of the fast forward function.
- Be sure to eject the tape when the vehicle's ignition is turned OFF. Leaving the tape in the unit can deform the pinch roller causing wow and flutter during tape

Fast Forward/Rewind

Since the transport can be in either direction, both the left and right high-speed tape transport buttons can be regarded as fast forward/ rewind buttons.

For fast forward, press the high-speed tape transport button that corresponds to the direction that is shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the opposite side of the tape (Auto-reverse).

For rewind, press the button that is opposite that of the direction shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the beginning of the same side of the tape (Auto-replay).

Fast forward and rewind can be terminated by pressing the respective opposite high-speed tape transport button.

Direction Change

Push the fast forward and rewind buttons together to switch from one side of the tape to the other (from Side A to Side B or vice

• Dolby B NR Switch (KEH-3200QR, KEH-3250QR)

Press when playing a tape recorded with Dolby NR.

• Tape Select Switch (KEH-3200QR, KEH-3250QR)

This switch is used to switch to the proper mode for the tape being used and should be depressed when using chrome or metal tapes.

Music Search (KEH-3200QR, KEH-3250QR)

Returning to the beginning of selection A

Press the music search button and then the high-speed tape transport button for the direction opposite that is shown by the direction indicator. Playback will automatically start from the beginning of selection A.

Moving from selection A to selection B

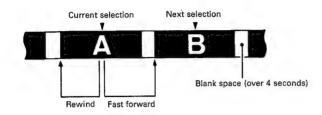
Press the music search button and then the high-speed tape transport button that corresponds to the direction shown by the direction indicator. Playback will automatically start from the beginning of selection B.

To enable regular fast forward/rewind operations, press the music search button again to turn the function OFF. The following errors will cause the music search function to operate improperly, even though the unit is not malfunctioning.

Unrecorded "blank" portions between selections less than 4 seconds → the blank portion cannot be detected by the unit.

Pauses in recorded conversations longer than 4 seconds → the unit reads these as blanks between selections.

- as blanks between selections.
- Portions recorded at very low volume for more than 4 seconds → the unit reads these as blanks between selections



4. CONNECTIONS

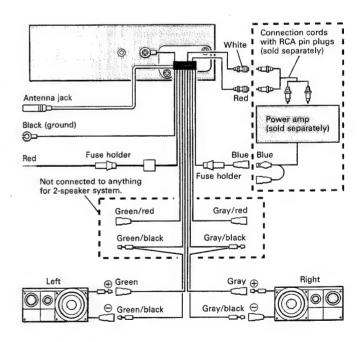
Note:

- To avoid shorts in the electrical system, be sure to disconnect the battery ⊖ cable before beginning installation.
- Replace fuses only with the types stipulated on the fuse holder.
- Be sure to properly connect the color coded leads. Failure to do so can cause malfunctions.
- Cover unused terminals with tape to prevent electrical shorts.
- Since a unique BPTL circuit is employed, never wire so the speaker leads are directly grounded or the left and right speaker
 ⊖ leads are common.
- Speakers connected to this unit must be a high-power type possessing maximum input of at least 25 W and impedance of 4 to 8 ohms. Connecting speakers with output and/or impedance values other than those noted here can damage the speakers.
- Refer to the power amp owner's manual when connecting a power amp (sold separately) to the RCA pin jack. (KEH-3200QR, KEH-2200QR, KEH-3250QR)
- When the power amp is being linked with this system, be sure not to connect the blue lead to the amp's power terminal. Likewise, when linking this system with the auto-antenna, do not connect to power terminal for the antenna. Such connection can make overcurrent cause malfunctions.

Black (ground)	To vehicle (metal) body.				
Blue	If this unit is combined with a power amp, connect its blue lead to the blue lead (system control terminal) of the power amp. If combined with an auto-antenna, connect its blue lead to the relay control terminal of the auto-antenna. (MAX. 300 mA, 12 V DC)				
Orange (KEH-1250)	To terminal always supplied with power regardless of ignition switch position.				
Red	To electric terminal controlled by ignition switch (12 V DC) ON/OFF.				

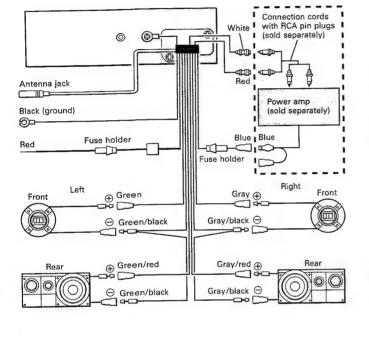
• KEH-3200QR, KEH-2200QR

2-speaker system



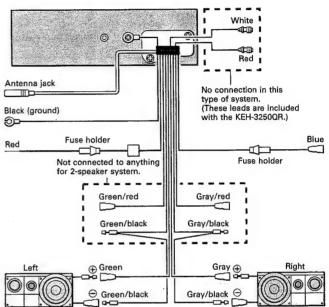


4-speaker system 1

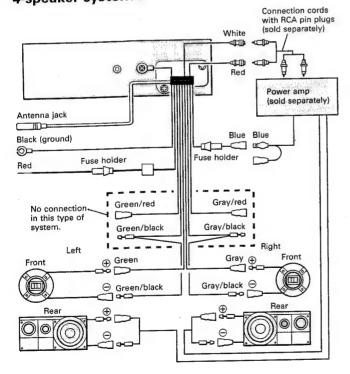


• KEH-3250QR, KEH-2250QR

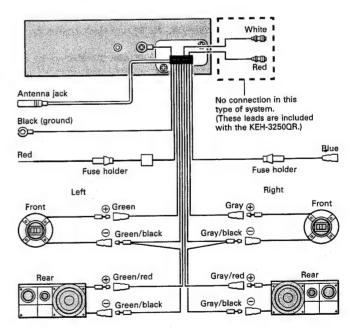
2-speaker system



4-speaker system 2

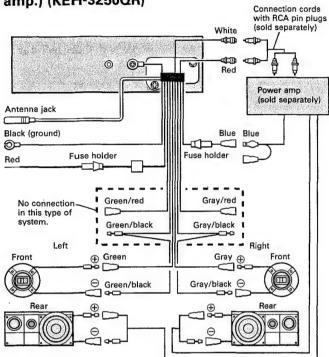


4-speaker system 1

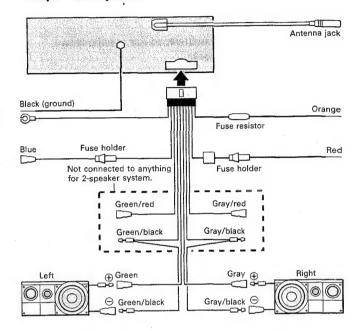




4-speaker system 2 (Using separately available amp.) (KEH-3250QR)

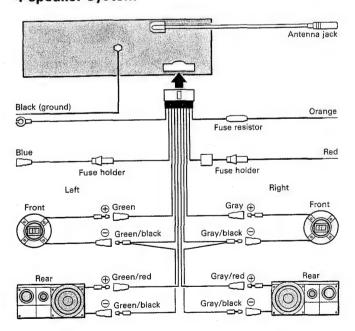


2-speaker system



● KEH-1250

4-speaker system



KEH-3200QR

5. DISASSEMBLY

Removing the Case

- 1. Insert and turn a screwdriver to remove the case.
- 2. Raise the case to remove.

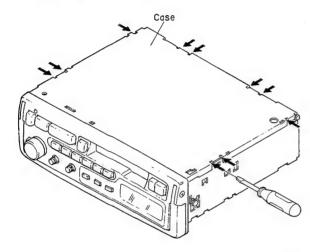


Fig. 1

• Removing the Handle

1. Remove the two screws, and then remove the handle.

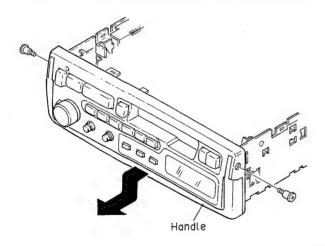


Fig. 2

Removing the Grille Assy

- 1. Remove the two knobs.
- 2. Press the tabs at four locations, and then pull out the grille assy.

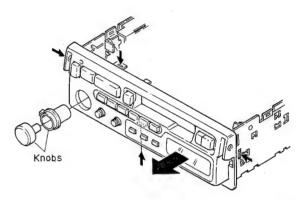
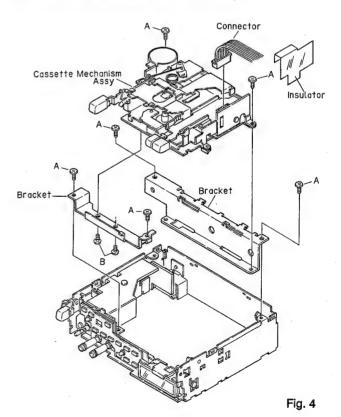


Fig. 3

Removing the Cassette Mechanism Assy

- 1. Remove the insulator
- 2. Disconnect the connector.
- 3. Remove the six screws A and two screws B.
- 4. Remove the cassette mechanism assy.





- Removing the Dolby NR P. C. Board (KEH-3200QR, KEH-3250QR)
- 1. Pull out the Dolby NR P. C. Board.

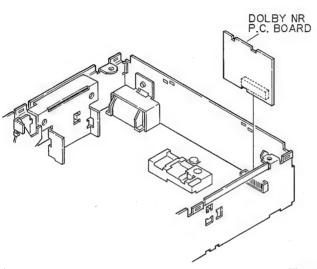


Fig. 5

- Removing the Tuner Amp Unit (KEH-1250/ES)
- 1. Remove the screw C and for screws D.
- 2. Raise up on tuner amp unit to remove it from the chassis unit.

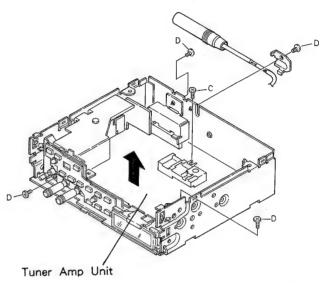


Fig. 7

- Removing the Tuner Amp Unit (KEH-3200QR, KEH-3250QR, KEH-2200QR, KEH-2250QR)
- 1. Remove the four screws C.
- 2. Raise up on tuner amp unit to remove it from the chassis unit.

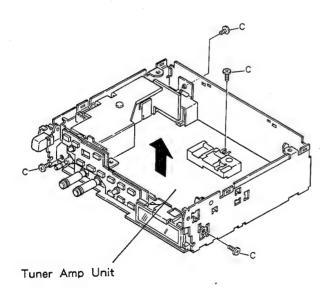


Fig. 6

KEH-3200QR

6. ADJUSTMENT

Connection Diagram

NOTICE:

Select C1 so that total capacity of 80pF is attained from the direction of the receiver jack. Z: Output impedance of SSG.

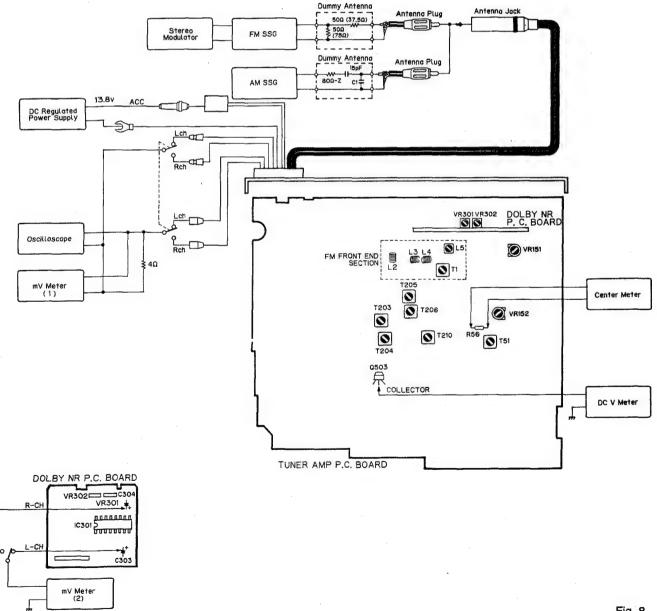


Fig. 8

DOLBY NR ADJUSTMENT (KEH-3200QR/UC, KEH-3250QR/ES)

No.	Cassette Tape	Adjusting Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz, 200nwb/m)	VR301 (Lch) VR302 (Rch)	mV Meter(2):-6dBs±1dB (DOLBY NR Switch:OFF)

FM ADJUSTMENT %1 Stereo MOD.: Pilot=10%

%2Stereo MOD.: 1kHz, L+R=90%, Pilot=10%

	No.	FM SSG(400	Hz, 100%)	Displayed	Adjusting Point	Adjustment Method
	INU.	Frequency(MHz)	Level(dBf)	Frequency (MHz)		(Switch Position)
Tun- ing Volt	1		-	108.0	L5	DC V Meter: 7.0V
Tra- cki-	1	98. 1	15	98. 1	L2, L4	mV Meter(1):Maximum
ng	2	98. 1	15	98. 1	T1	mV Meter(1):Maximum
ĬF	1	98.1 Unmodulated	65	98. 1	T51	Center Meter:0
Pil- ot Can- cel	Y	98. 1※ 1	65	98. 1	VR151	mV Meter(1):Minimum (MPX Filter:OFF)
ARC	1	98. 1% 2	40	98. 1	VR152	mV Meter(1):Separation 5dB



AM ADJUSTMENT

	No.	AM SSG(400	Hz.30%)	1	Adjusting Point	Adjustment Method (Switch Position)
		Frequency(kHz)	Level (dB μ V)			
Tun- ing Volt	1	_	_	530	T210	DC V Meter:1.0V
Tra- cki- ng	1	1,000	20	1,000	T203, 204, 205, 206	mV Meter(1):Maximum

AM ADJUSTMENT ES model when tuning step at 9kHz. (KEH-3250QR/ES, KEH-2250QR/ES, KEH-1250/ES)

		No.	AM SSG(400	Hz,30%)	Displayed Frequency (kHz)	Adjusting Point	Adjustment Method (Switch Position)
	110.	140.	Frequency(kHz)	Level(dBµV)			
in	un- ng olt	1	-	_	531	T210	DC V Meter:1.0V
	ra- ki-	1	603	20	603	T203, 204, 205, 206	mV Meter(1):Maximum

13

14



7. BLOCK DIAGRAM

● KEH-3200QR/UC

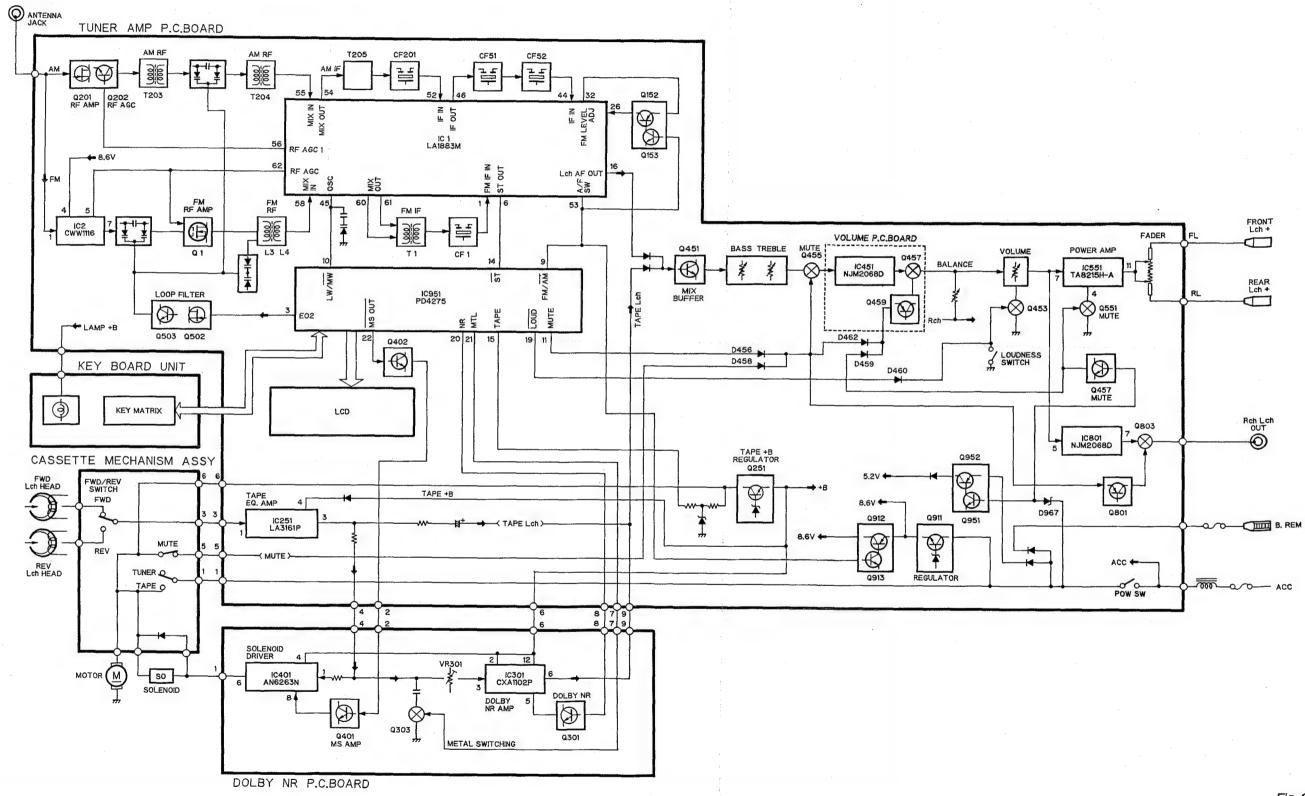
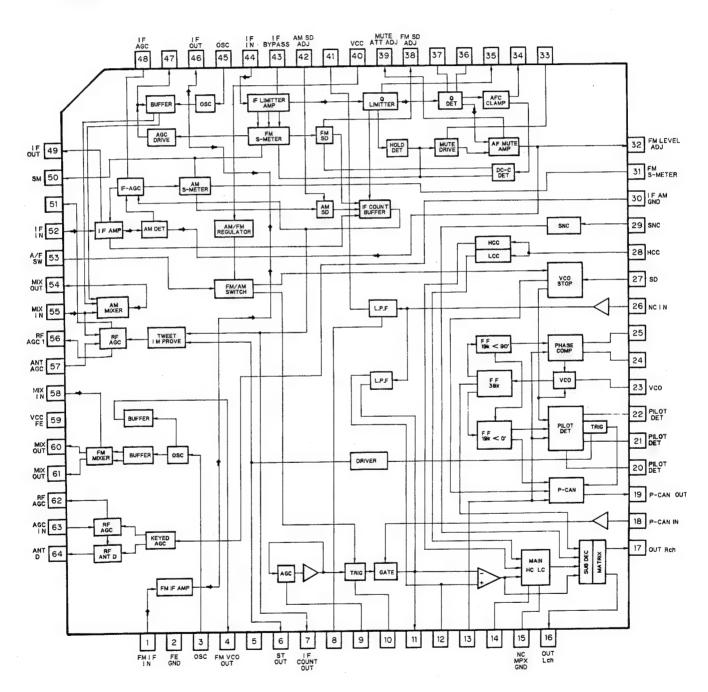


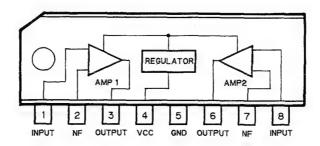
Fig. 9

• ICs

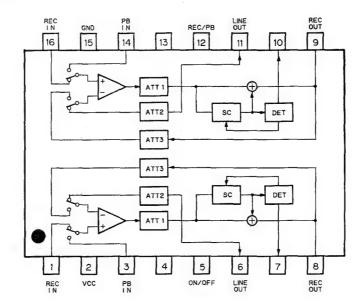
LA1883M



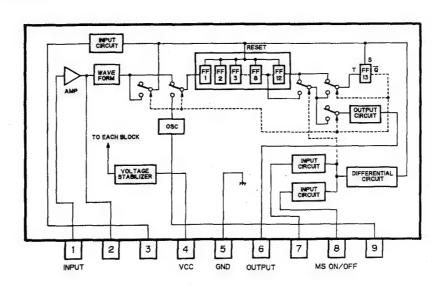
LA3161P

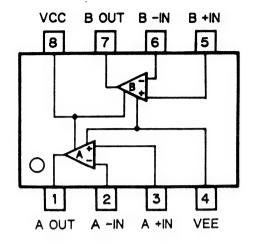


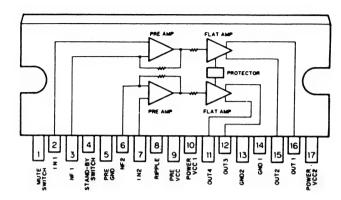
CXA1102P



AN6263N

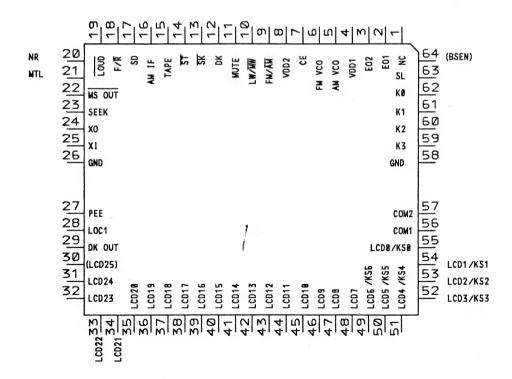






*PD4275

IC's marked by * are MOS type. Be careful in handling them because they are very liable to be damaged by electrostatic induction.



• Pin Function (PD4275)

Pin No.	Pin Name	1/0	Output Format	Function and Operation
1	NC		С	Not used
	E01 E02	Output	C(3)	PLL error output pins
	VDD1 VDD2			Device power supply pin
5	VCOL	Input		AM local oscillator signal input pin
6	VCOH	Input		FM local oscillator signal input pin
7	CE	Input		Chip enable input pin
9	FM/AM	Output	С	FM/AM band select pin "H":FM "L":AM
10	LW	Output	C	Loop filter switching output pin "H":LW
1 1	MUTE	Output	С	Mute output pin "H":ON
12	DK	INPUT		SK signal input pin
13	ਡĸ	INPUT		DK signal input pin
14	इт	Input	:	Stereo broadcast detection signal input pin "L":Stereo indicator is displayed
15	TAPE .	INPUT		Tape power ON/OFF input pin "H":ON
16	AMIF	Input		AM IF signal input pin
17	SD	Input		FM SD input "H":During broadcast reception
18	F/REV	Input		Tape motion signal input pin "H":Forward
19	LOUD	Input		Loudness ON/OFF signal input pin "L":ON
20	NR	Output	С	Dolby NR ON/OFF output pin "H":ON
21	METAL	Output	, C	Tape METAL ON/OFF output pin "L":ON
22	MSOUT	Output	С	Tape MS ON/OFF output pin "L":ON
23	SEEK	Output	С	"H" level:SEEK, BSM, BSA and PSCAN
24 25	X0	Output Input	С	Quartz oscillator terminal
26	GND			GND terminal
27	PEE	Output	С	Alarm output pin
28	LOC1	Output	С	Halt sensitivity switching pin
				"L":DX SEEK(P. SCAN) "H":LOC SEEK
29	DKOUT	Output	C	Control by DK(terminal #12) input signal "H": DK input signal is detected as 125Hz
30	NC			Not used

Pin No. 3 | 5! | 5! | 5! | 5! | 5! | 62

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6: 6:

: LW

put pin

.

eption —— ward

:ON

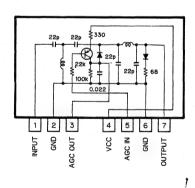
jnal 5Hz

20

Pin Nő.	Pin Name	1/0	Output Format	Function and Operation
31 55	LCD24 I LCD0	Output	G .	Segment signal output pins to LCD
48 55	KS7 KS0	Output	С	Key matrix strobe output pins
56 57	COM1 COM2	Output	С	Common signal output pins to LCD
59 62	кз ! ко	Input		Key matrix return input pins
63	SL	Input		AM station level anarog input pin
64	NC		C	Not used

Output format	Meaning
С	C-MOS
C(3)	C-MOS(3 State)

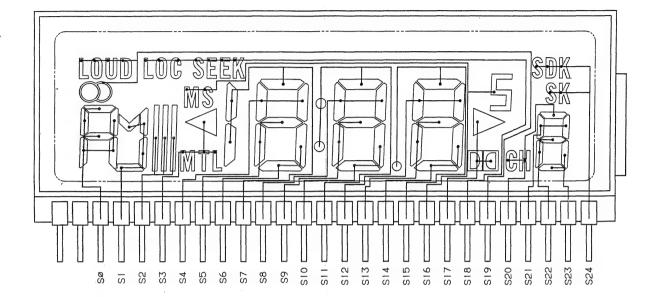
CWW1116



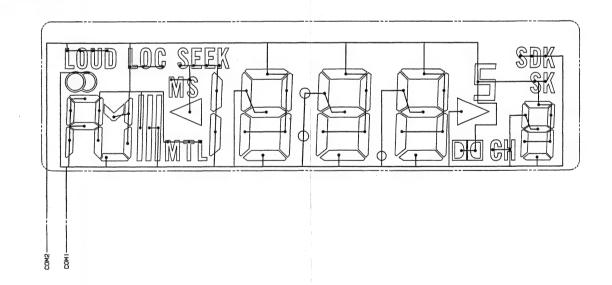


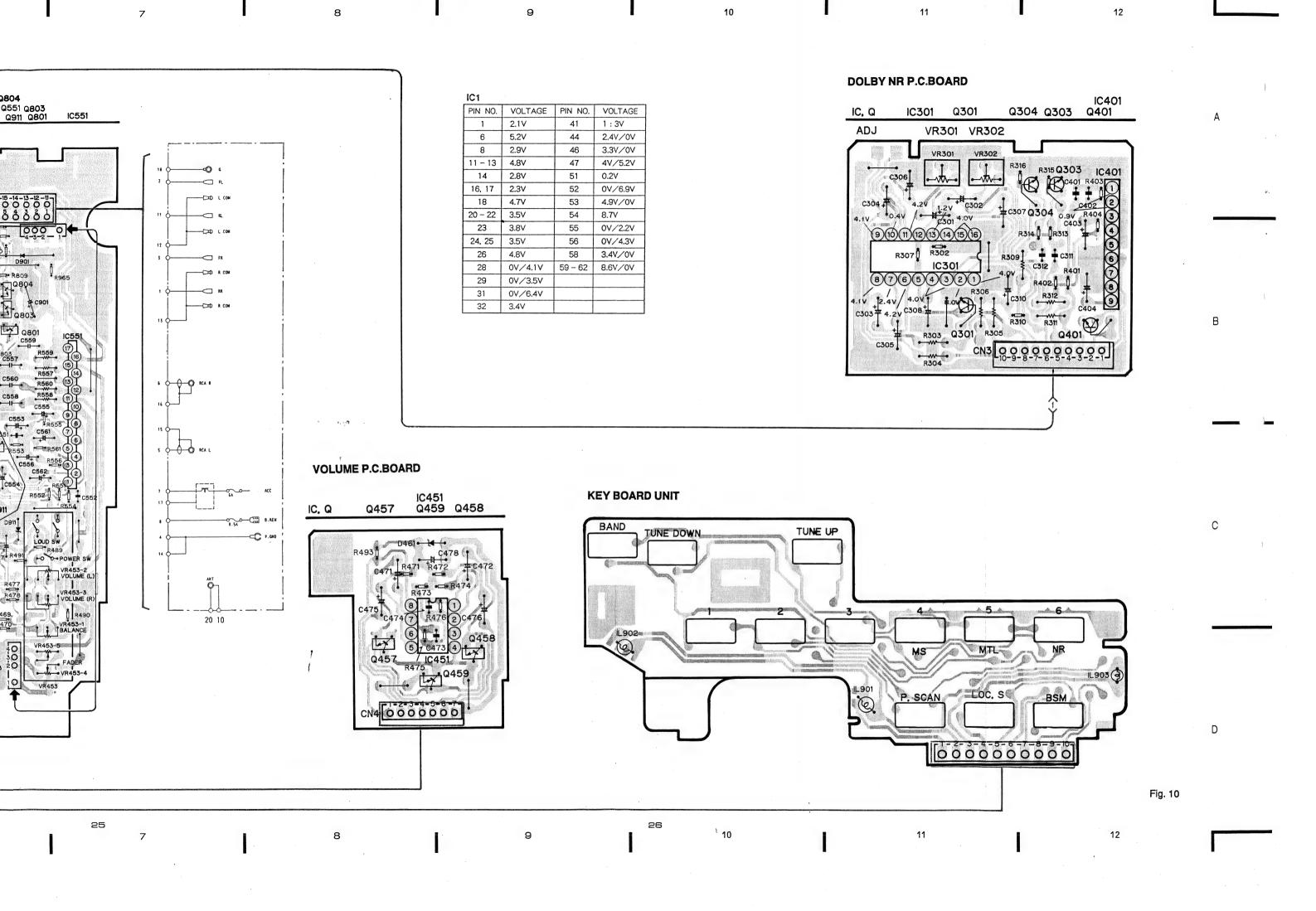
● LCD(CAW1162)

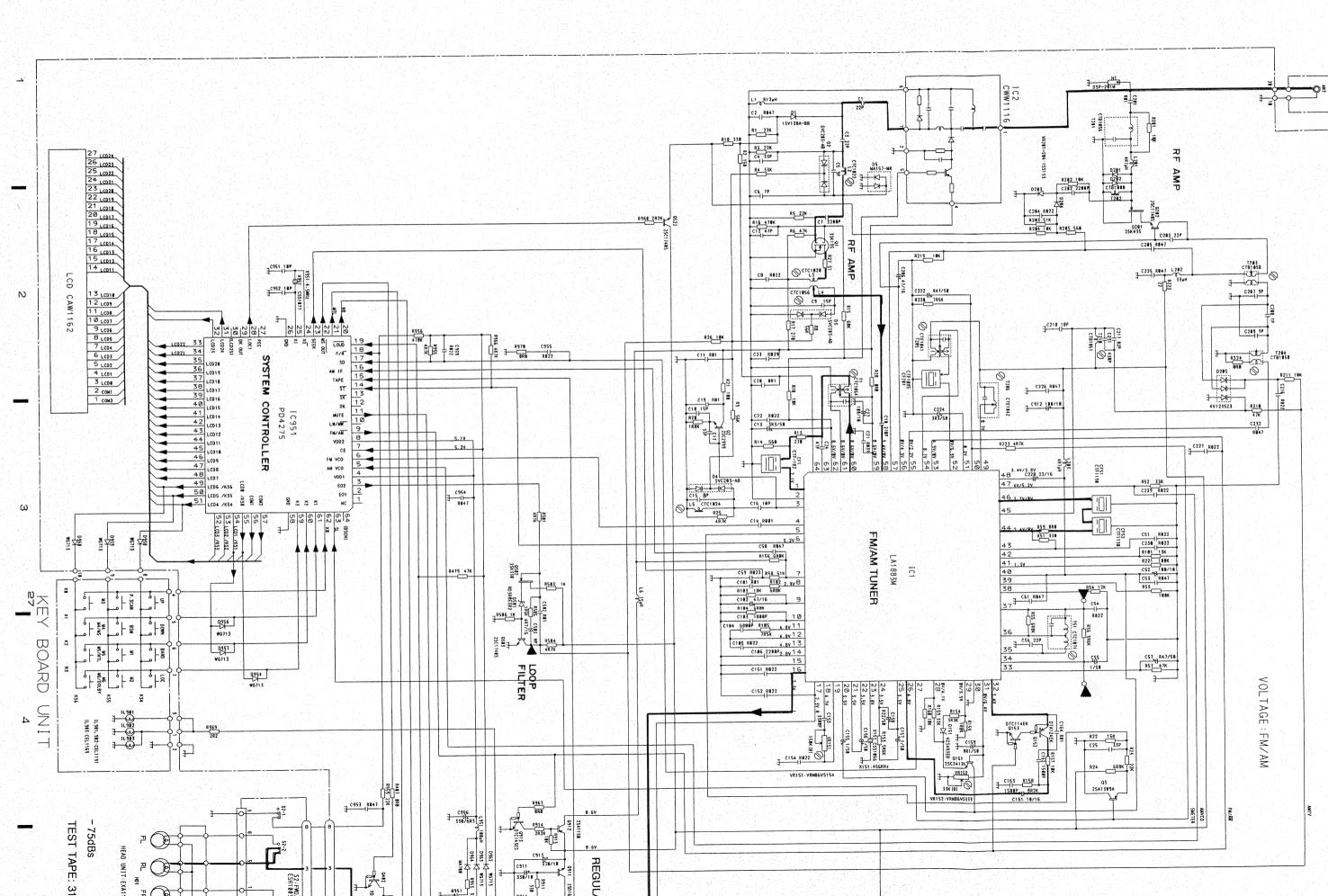
SEGMENT

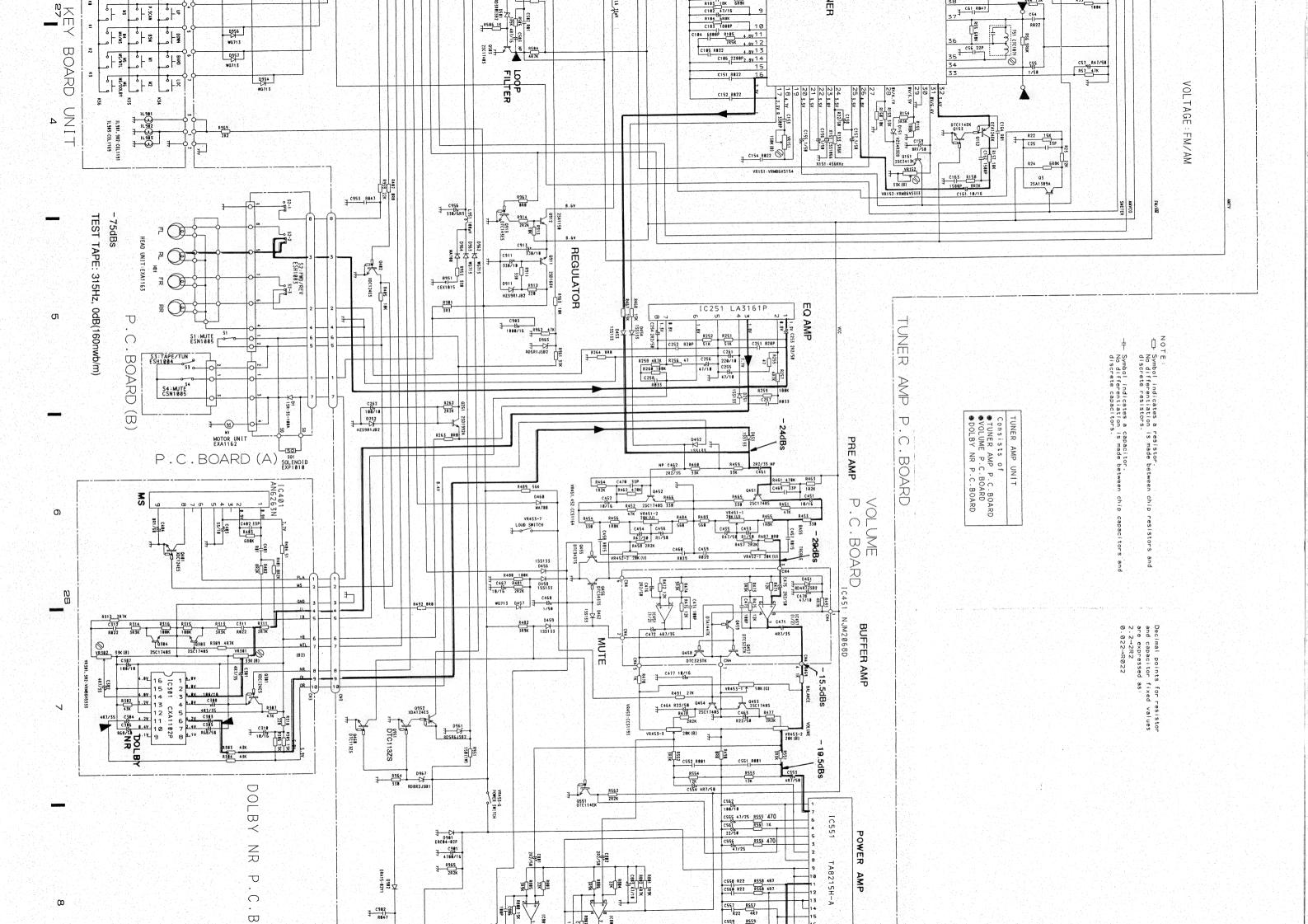


COMMON











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 \Box

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EQ AMP IC251 LA3161P 0dB(160nwb/m) U TUNER NOTE:

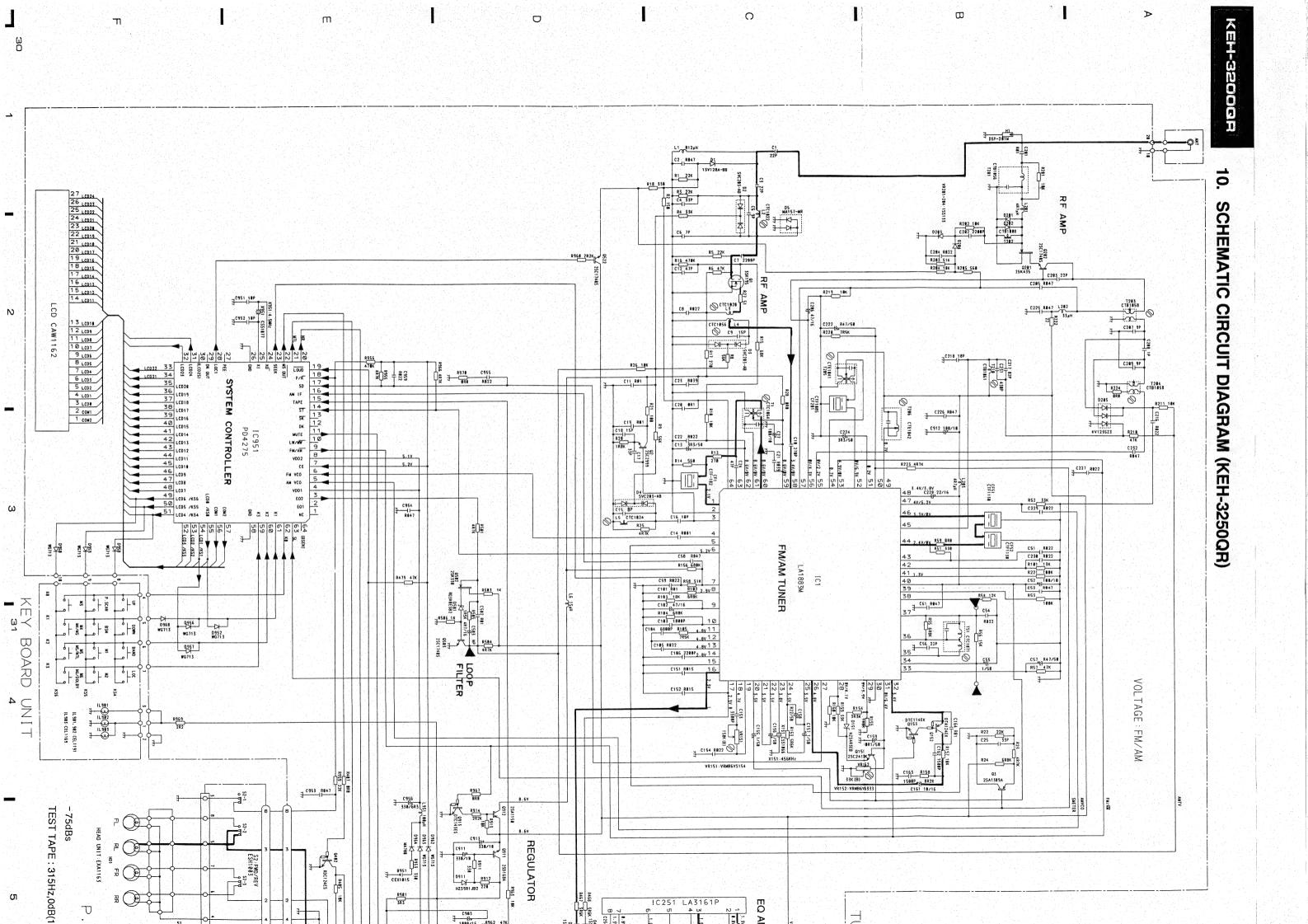
Or Symbol indicates a resistor.

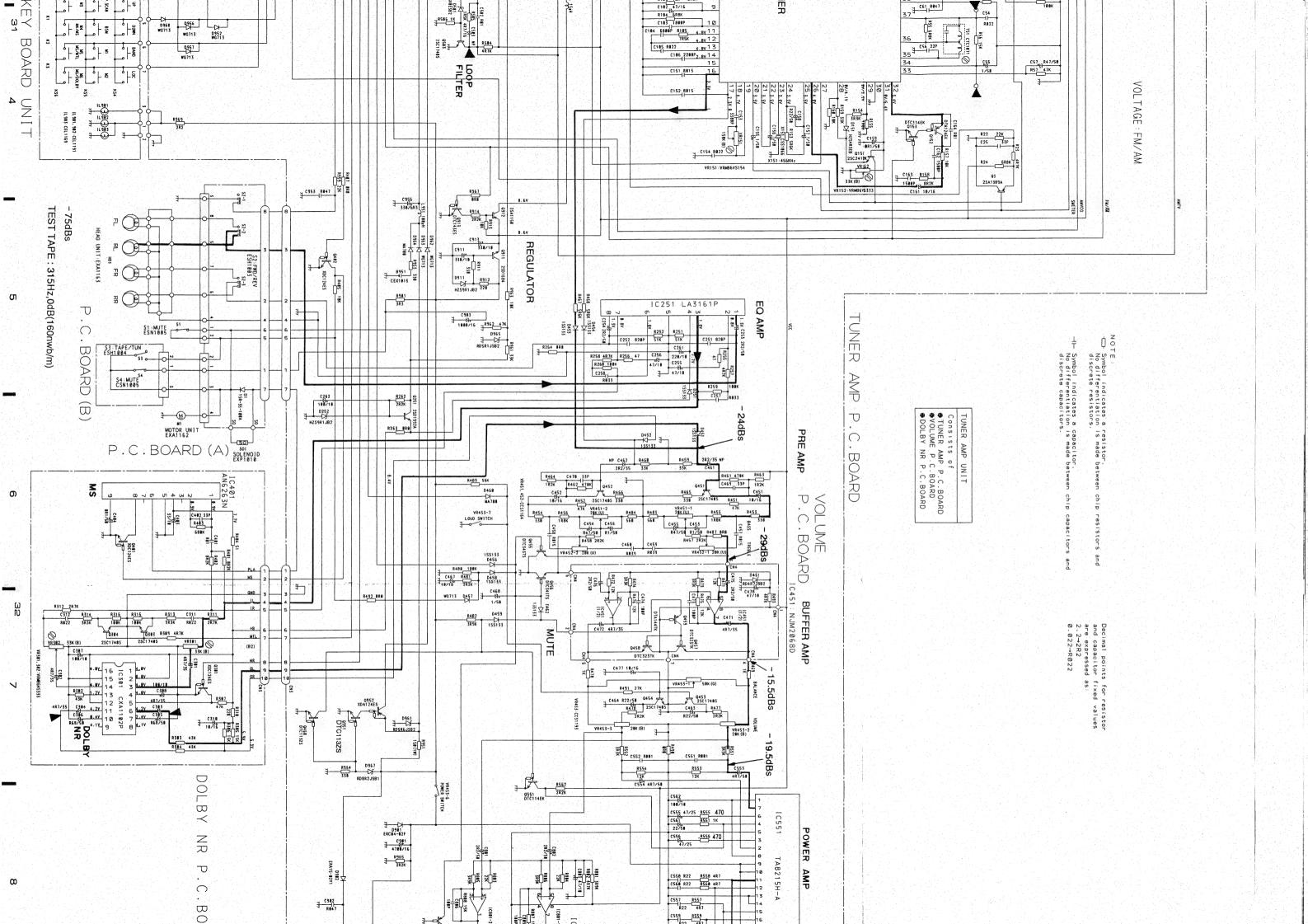
No differentiation is made between discrete resistors. C.BOARD (B) S1 MUTE ESN1005 S3: TAPE/TUN ESH1004 Symbol indicates a capacitor. No differentiation is made be discrete capacitors. AMP S4:MUTE CSN1005 R262 281 25D1992A C252 188/18 0252 HZS9R1JB2 Consists of
TUNER AMP P.C.BOARD
VOLUME P.C.BOARD
DOLBY NR P.C.BOARD P. () MOTOR UNIT PRE AMP P.C.BOARD (A) SOLENOID SOLENOID SOLENOID SOLENOID . BOARD VOLUME P.C.BOARD, VR453-7 LOUD SWITCH C482 33P R483 688K 17X C413 1885 17X 6451 83 0459 BUFFER AMP MUTE C477 18/16 4381 XDC124ES 0453 25C17485 C463 R477 R22/58 2R2K Dich 1325 DTC113ZS R964 D967 DOLBY POWER SWITCH C555 47/25 8555 470 C561 8561 1K D981 ERC84-82F C991 4788/16 POWER Z R AMP 7 \bigcirc ∞ .BOARD RCA PREOUT + + VR453-4).5dBs <u>=</u>9 100 CON Δ <u>^</u> € . 72 **2** 6 Fig.

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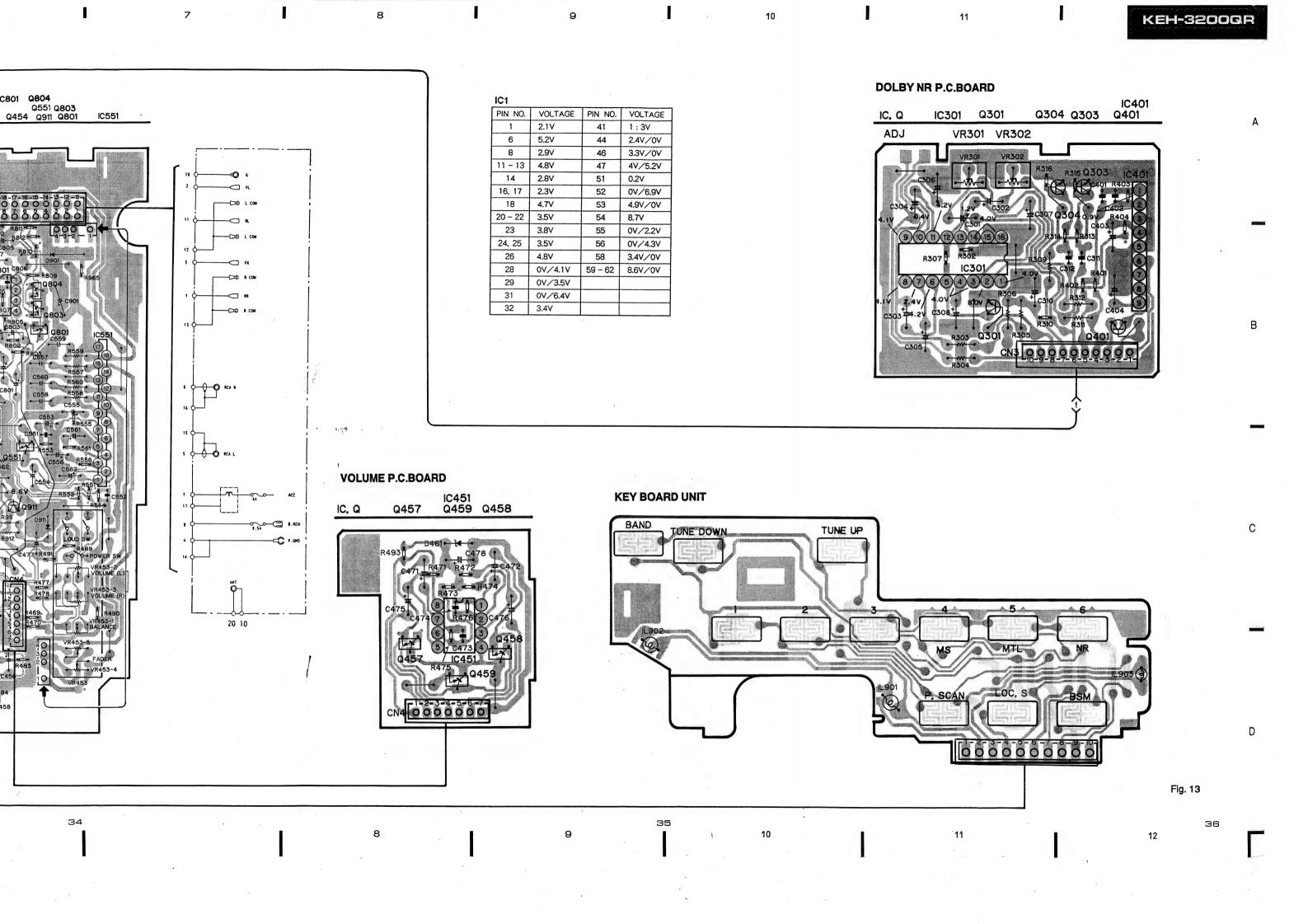


160nwb/m) \bigcap_{\cdot} S1 MUTE ESN1005 D965 D965 RD5R1 J5B2 JNER AMP BOARD (B) S4: MUTE CSN1005 C262 188/18 D252 HZ59R1J82 MOTOR UNIT R263 BR0 P.C.BOARD PRE AMP P.C.BOARD (A) SOLENOID SOLENOID SOLENOID VOLUME P.C.BOARD 155133 D456 D458 D458 155133 C468 D459 D459 BUFFER AMP 451 NJM2068D Q952 XDA124ES Dici1328) DTC113ZS R964 DOLBY POWER SWITCH C562 198718 C555 41/25 R555 470 C561 R561 1K D981 ERC64-82F C981 4786/16 POWER AMP NR R -R556 470 P.C .BOARD RCA PREOUT 1111 VR453-4 4 20.5dBs / Tab Low ¥ ... <u>^</u>

Symbol indicates a capacitor. No differentiation is made be discrete capacitors.

TUNER AMP UNIT

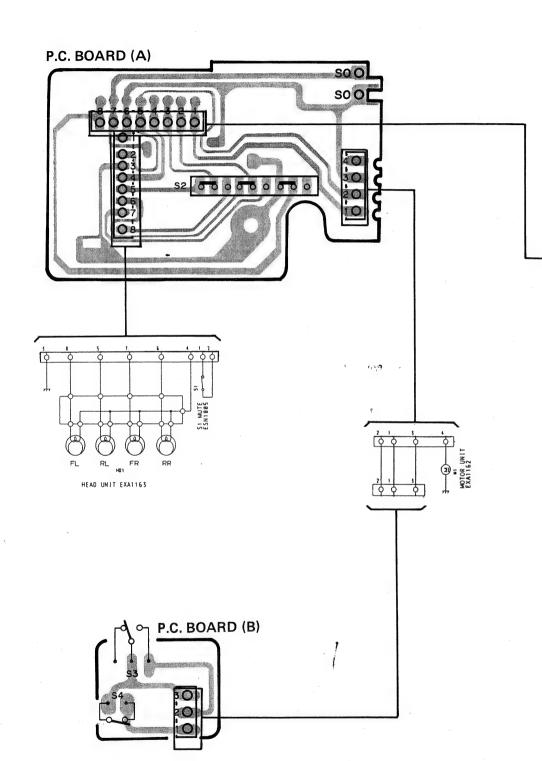
Consists of
STUNER AMP P.C.BOARD
VOLUME P.C.BOARD
DOLBY NR P.C.BOARD



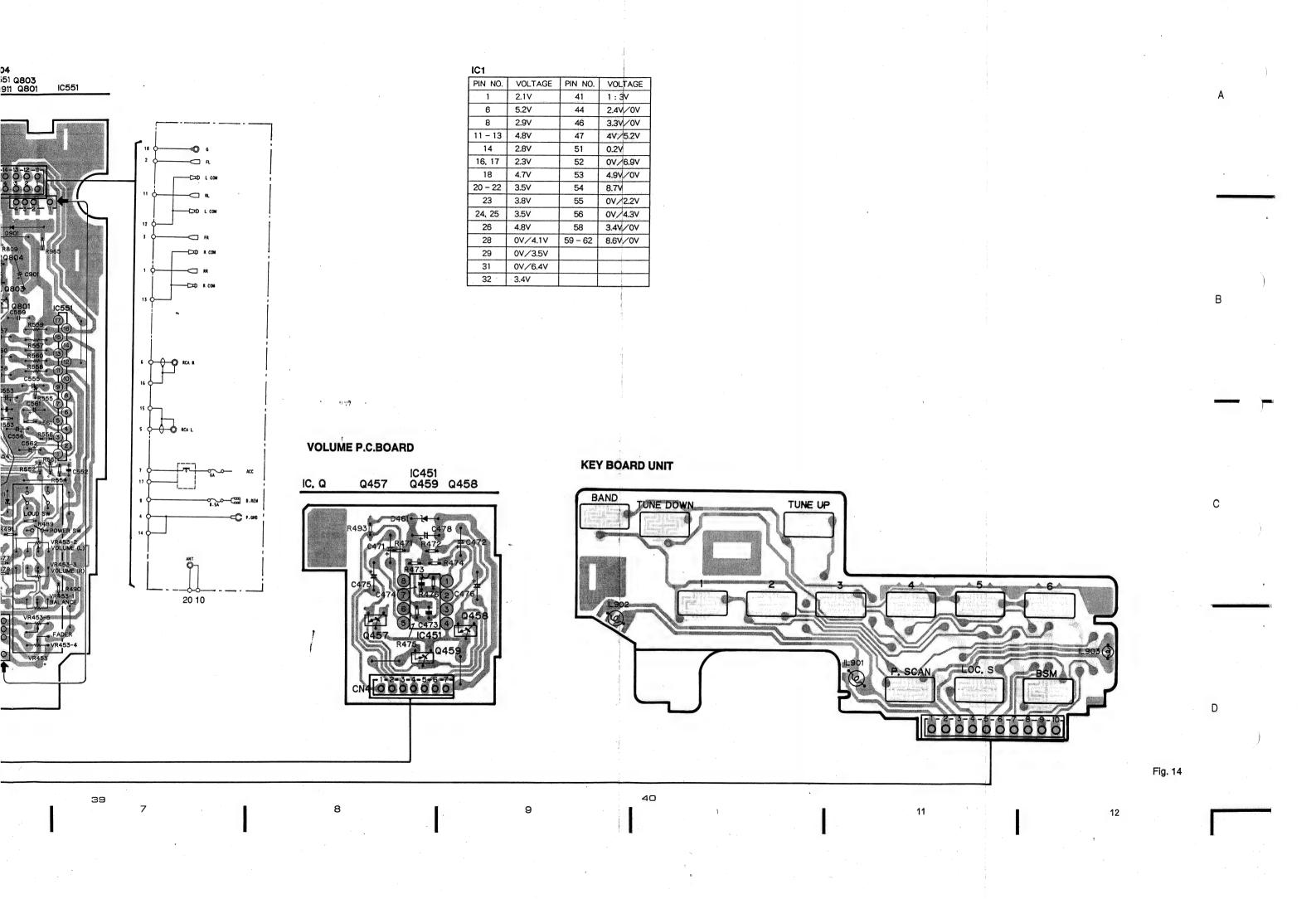
KEH-3200QR

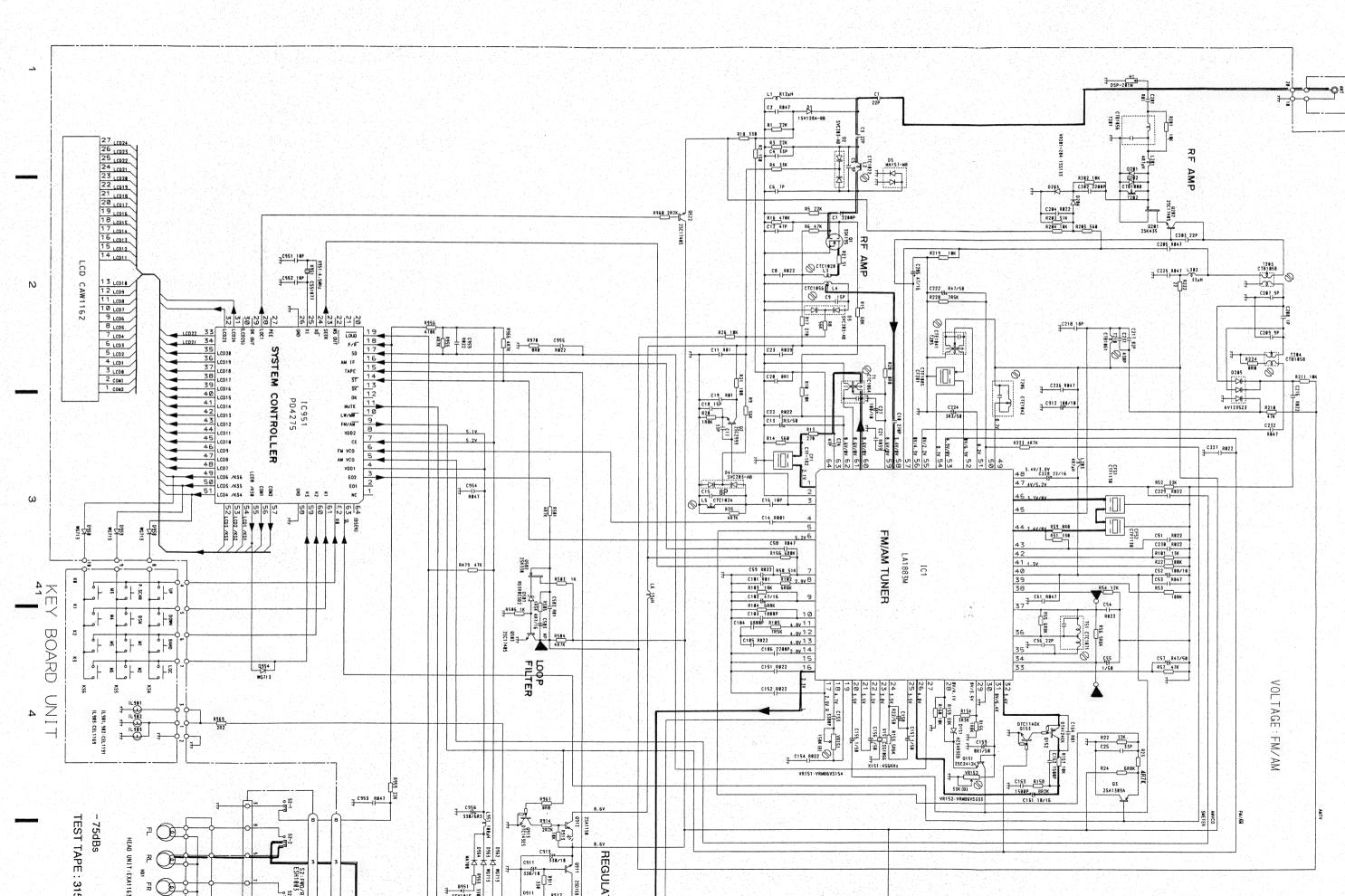
TUNER AMP P.C.BOARD

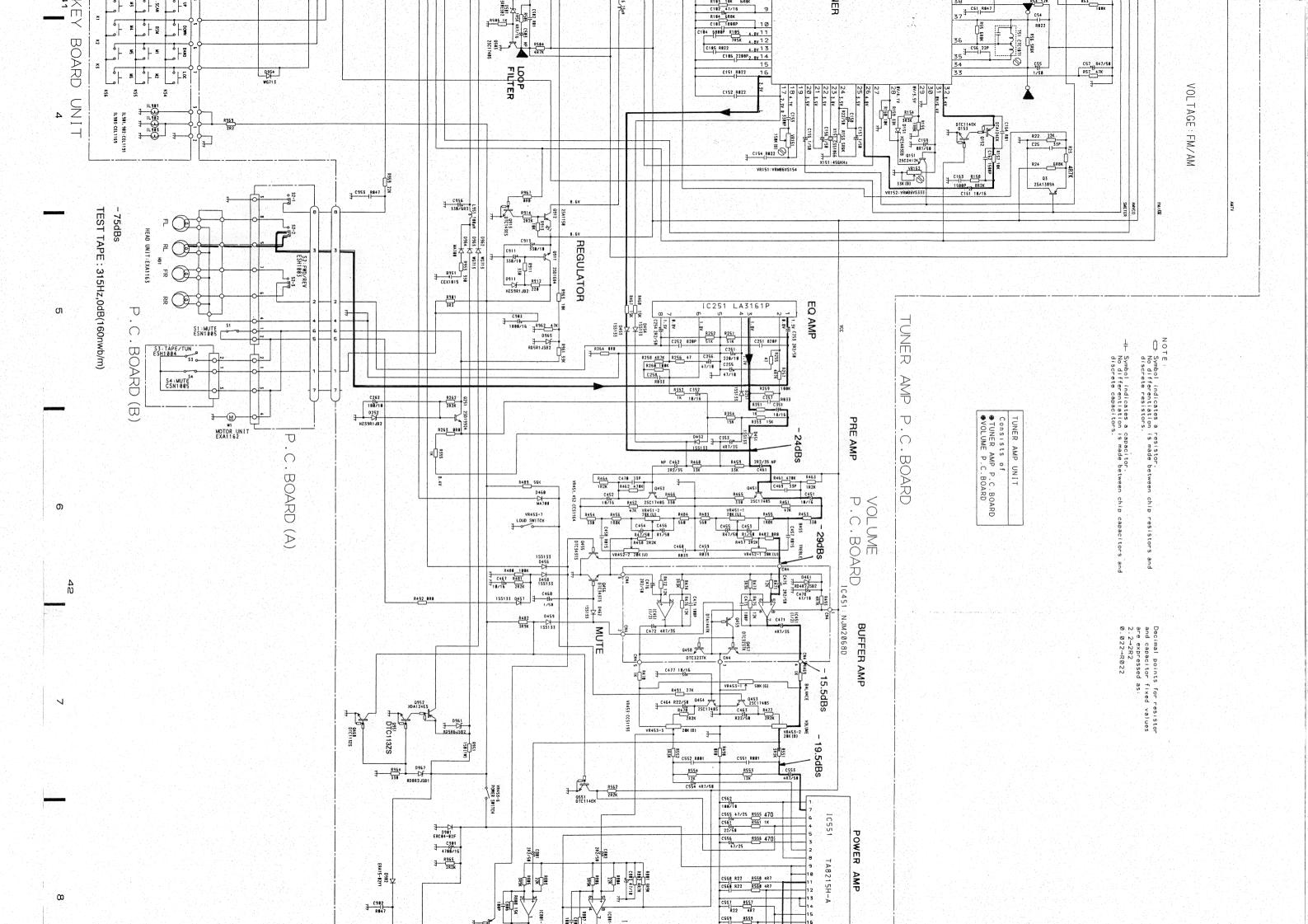
Q202 Q201 | IC801 Q804 | Q912 Q913 | Q551 Q803 Q456 Q455 Q522 Q453 Q454 Q911 Q801



12. CONNECTION DIAGRAM (KEH-2200QR)







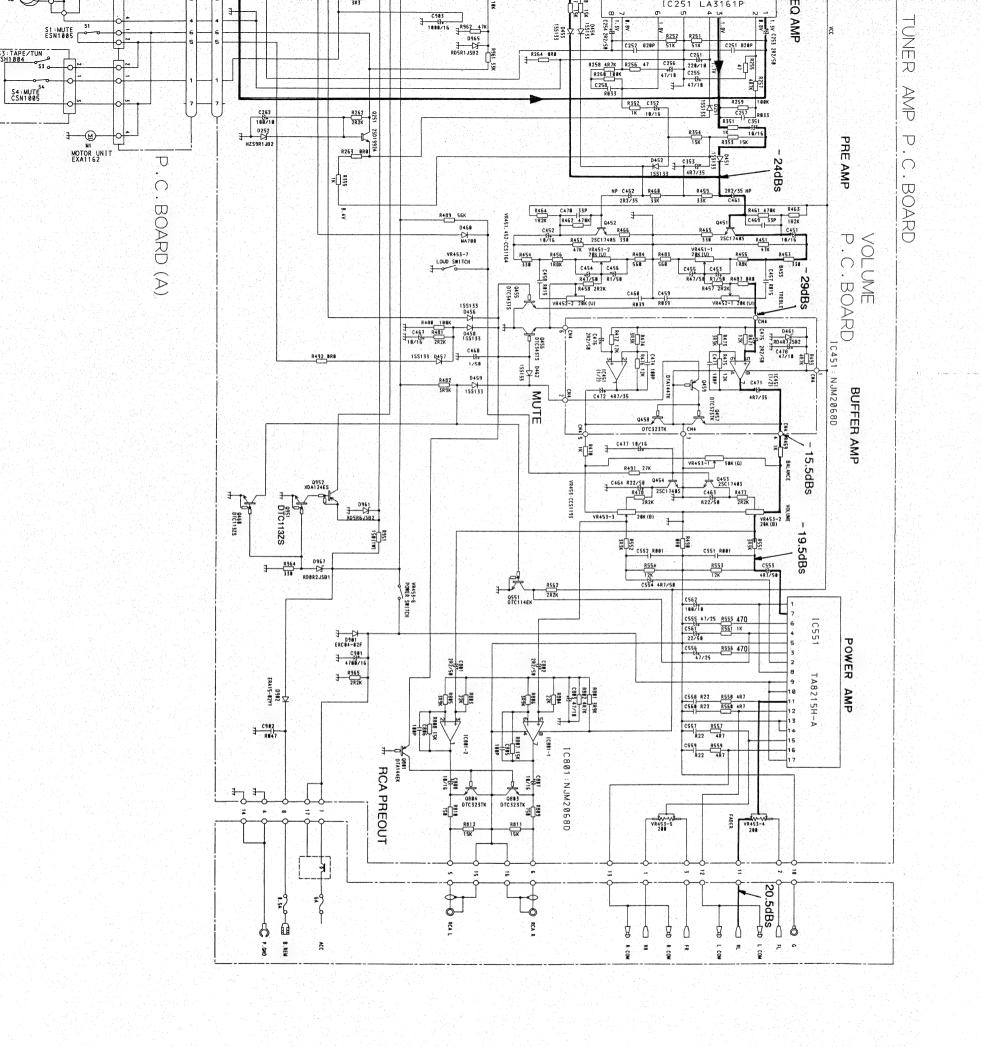
Symbol indicates a capacitor.
 No differentiation is made between chip capacitors
 discrete capacitors.

mal points for resisto capacitor fixed value expressed as:
→2R2
>2→R072

Consists of

Batuner amp p.c.Board

VOLUME P.C.BOARD



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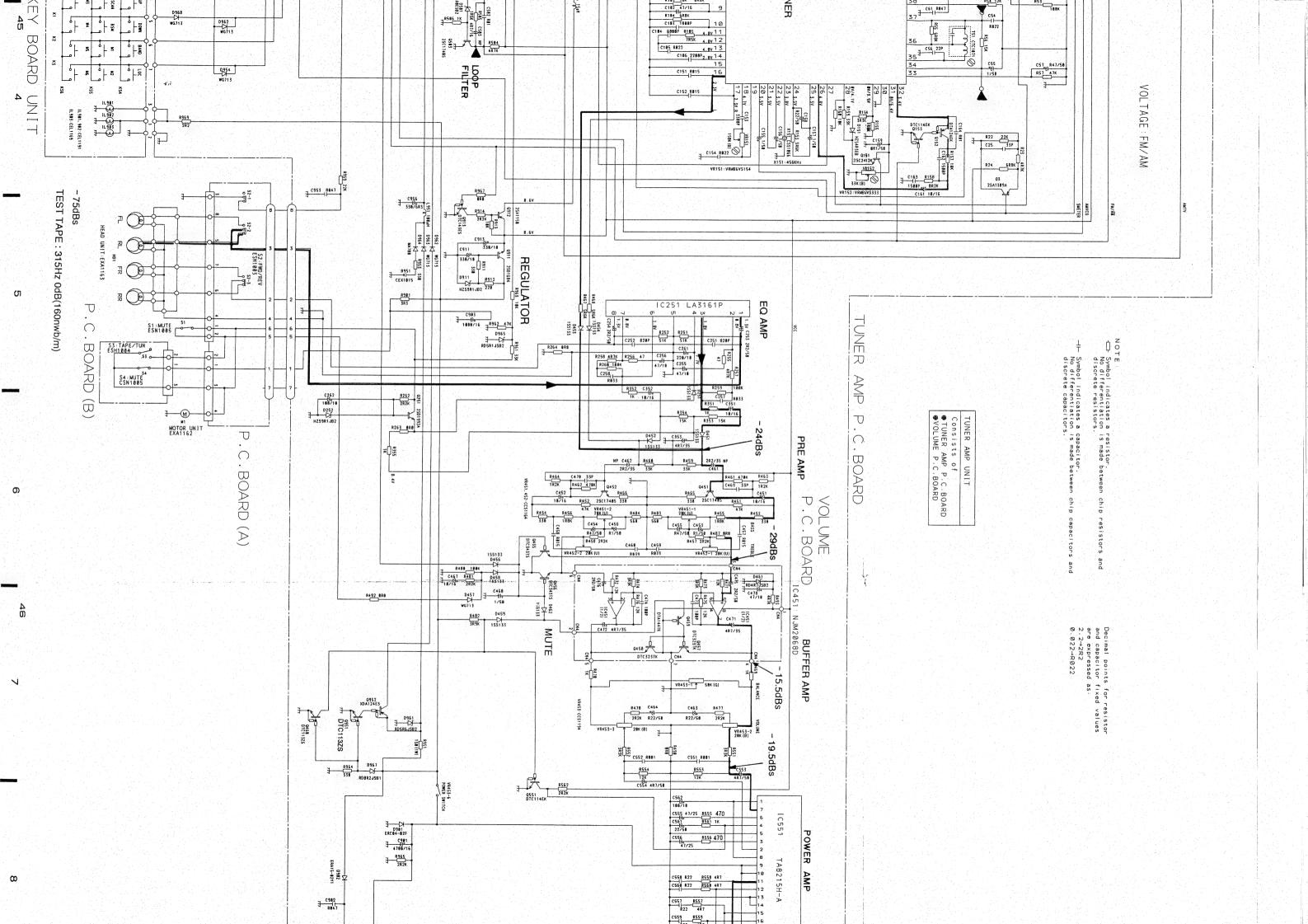
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Fig. 15

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)dB(160nwb/m)

P.C.BOARD (B)



RD5R1 JSB2 C252 828P 51K 51K C251 R258 477 C256 R258 187K R256 47 C256 R268 187K R256 47 C256 R268 187K R258 47/18 C258 R833 NE R S3: TAPE/TUN ESH1004 BOARD (B) AMP S4: MUTE CSN1005 C262 100/18 D252 HZ59R1JB2 MOTOR UNIT R263 BR8 P.C.BOARD P.C.BOARD (A) PRE AMP **≠**0∰ VOLUME P.C.BOARD 0457 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 0450 | 04 R492 BR8 BUFFER AMP MUTE - 15.5dBs R478 C464 2R2K R22/58 -19.5dBs R964 C552 188/18 C555 41/25 R555 470 C561 R551 1K 22/58 R556 470 47/25 D981 ERC84-82F C981 4788/16 POWER 0982 ERA15-82Y1 AMP 1 1 = 7 VR453-4 4 20.5dBs FL ٩٠ - E ¥ ... <u>\</u> ACC

—I Symbol indicates a capacitor. No differentiation is made betwee discrete capacitors.

TUNER AMP UNIT
Consists of
STUNER AMP P.C.BOARD
VOLUME P.C.BOARD

NOTE:
Symbol indicates a resistor.
No differentiation is made between discrete resistors.

Fig. 16

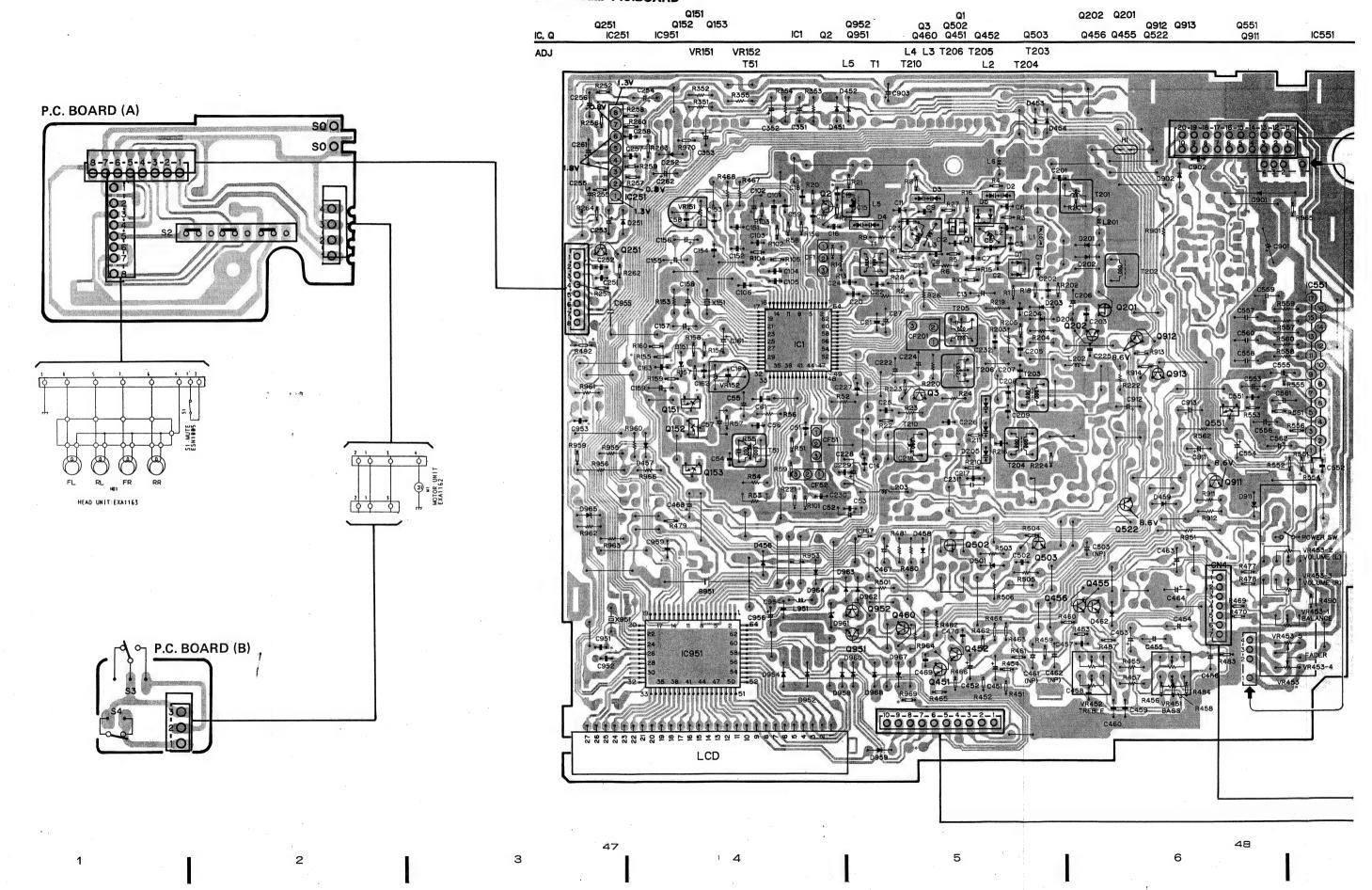
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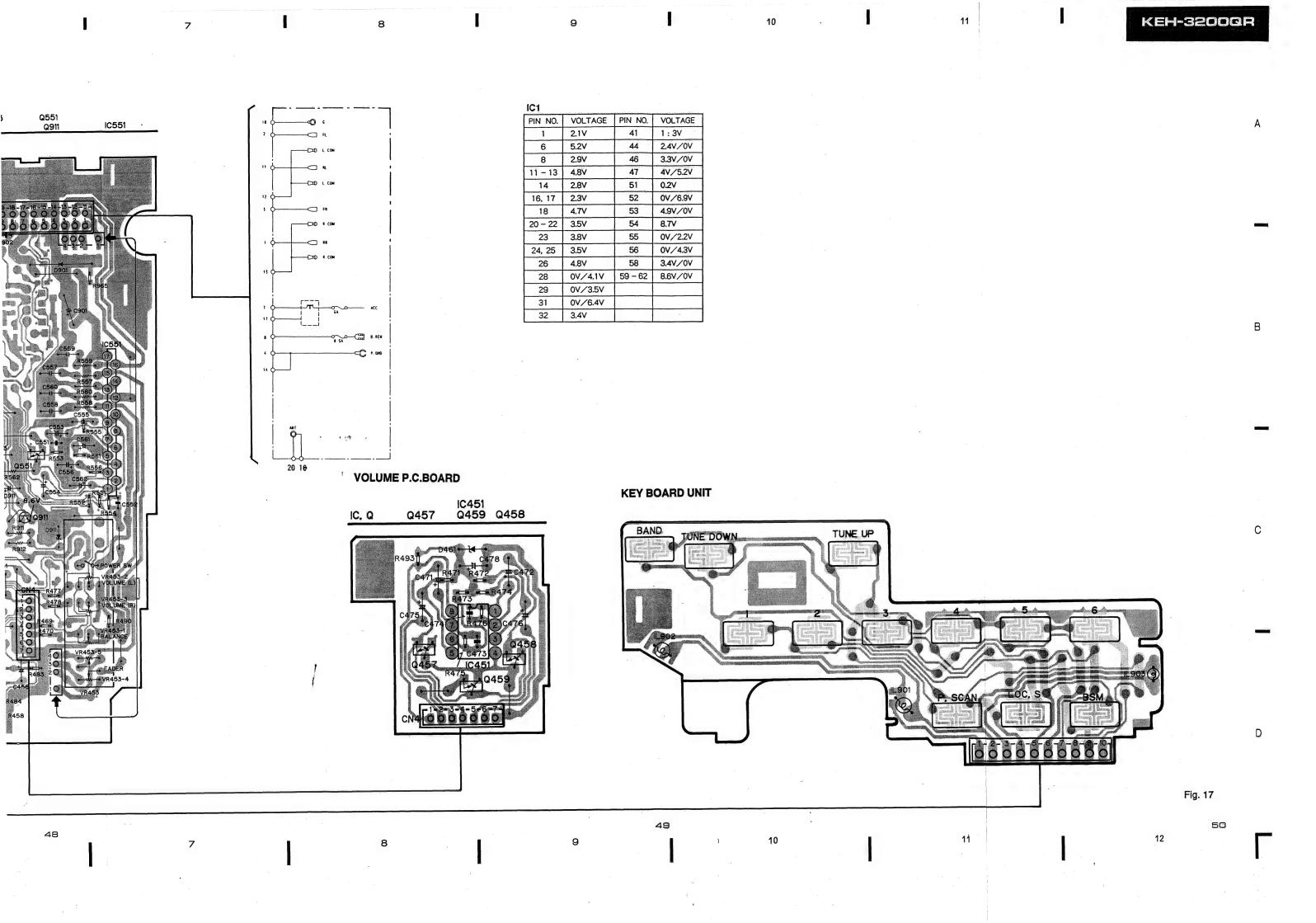
(m/d

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15. CONNECTION DIAGRAM (KEH-2250QR)

TUNER AMP P.C.BOARD





KEH-3200GR

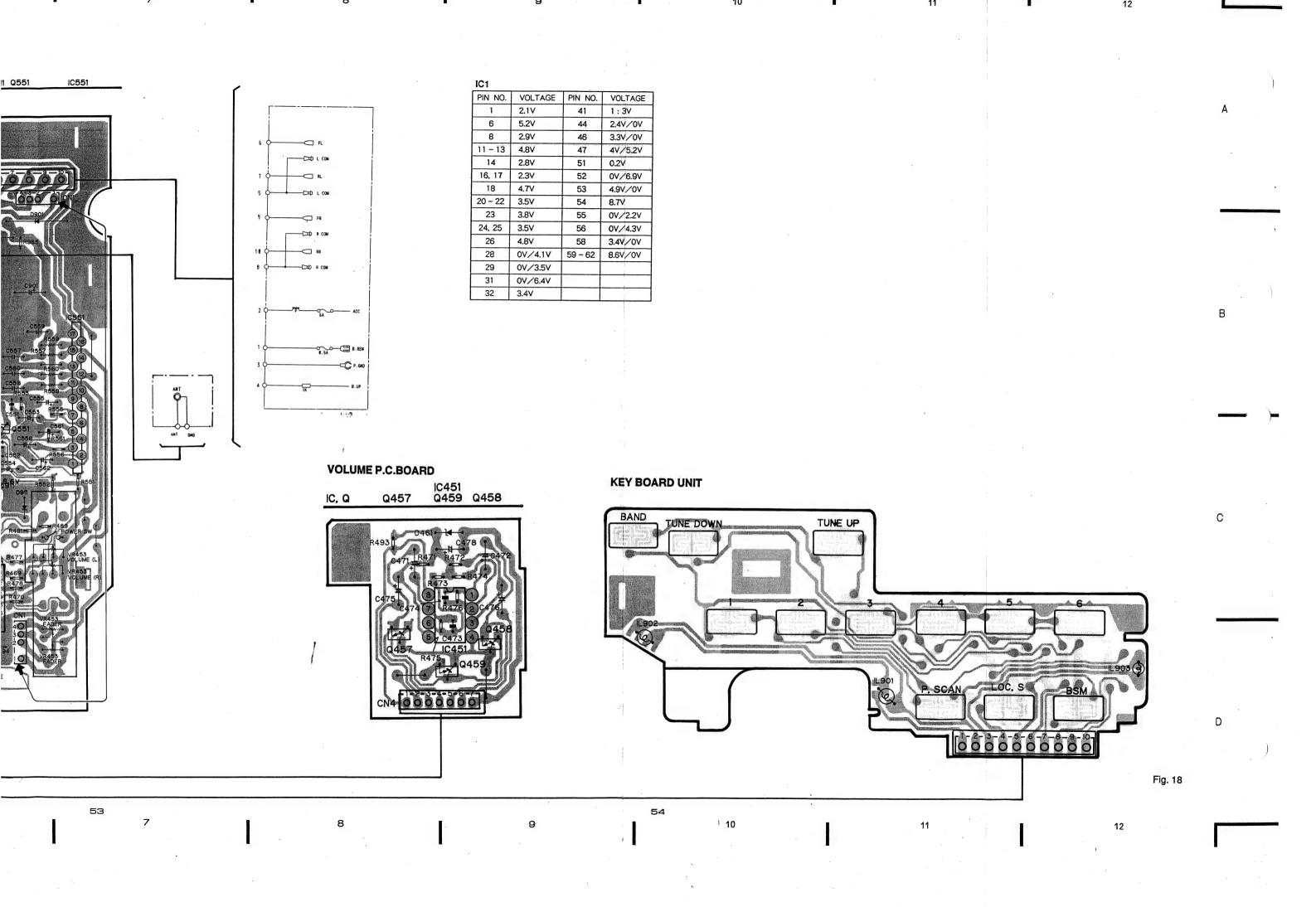
TUNER AMP P.C.BOARD

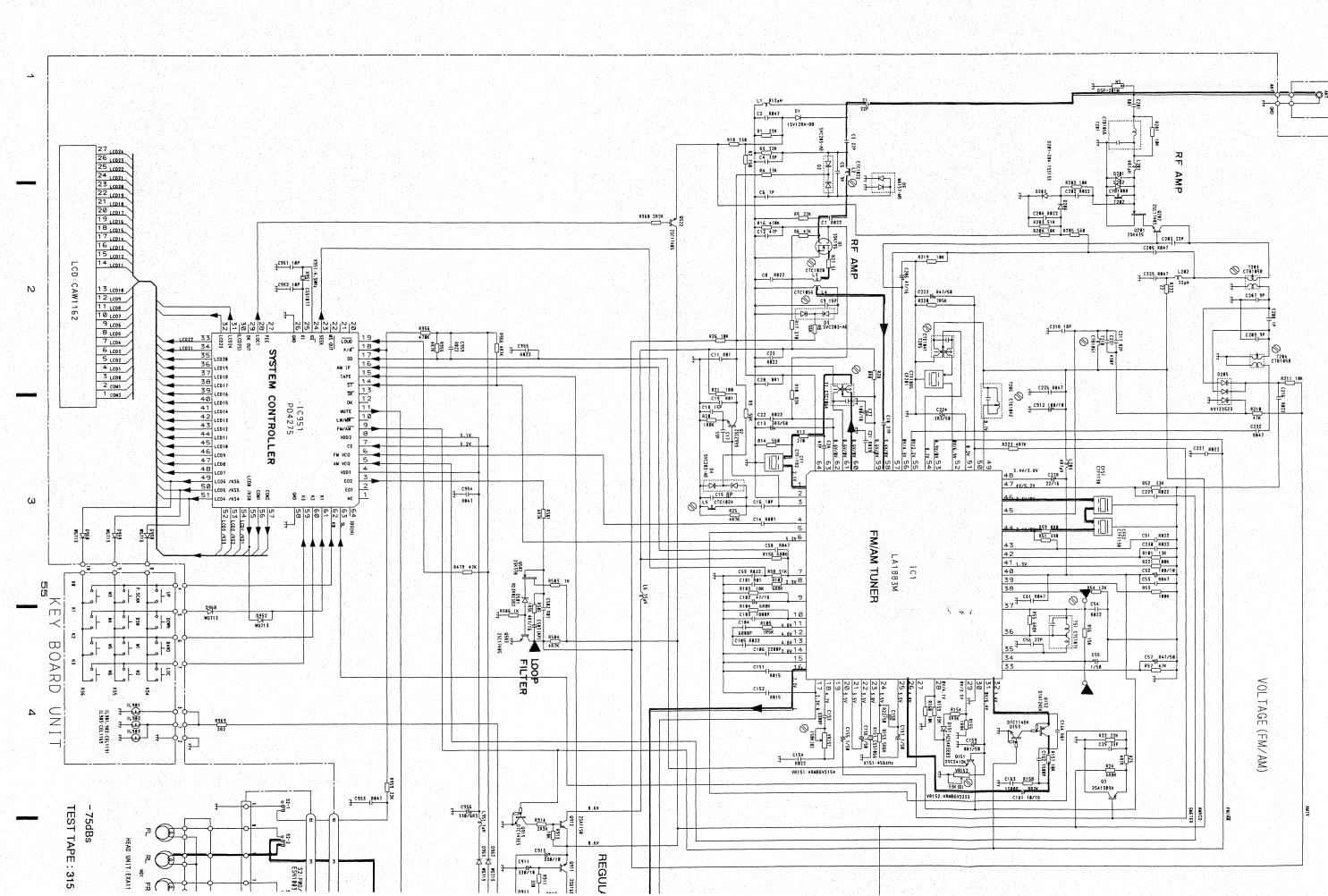
IC. Q Q251 IC251 IC951 Q153 Q152

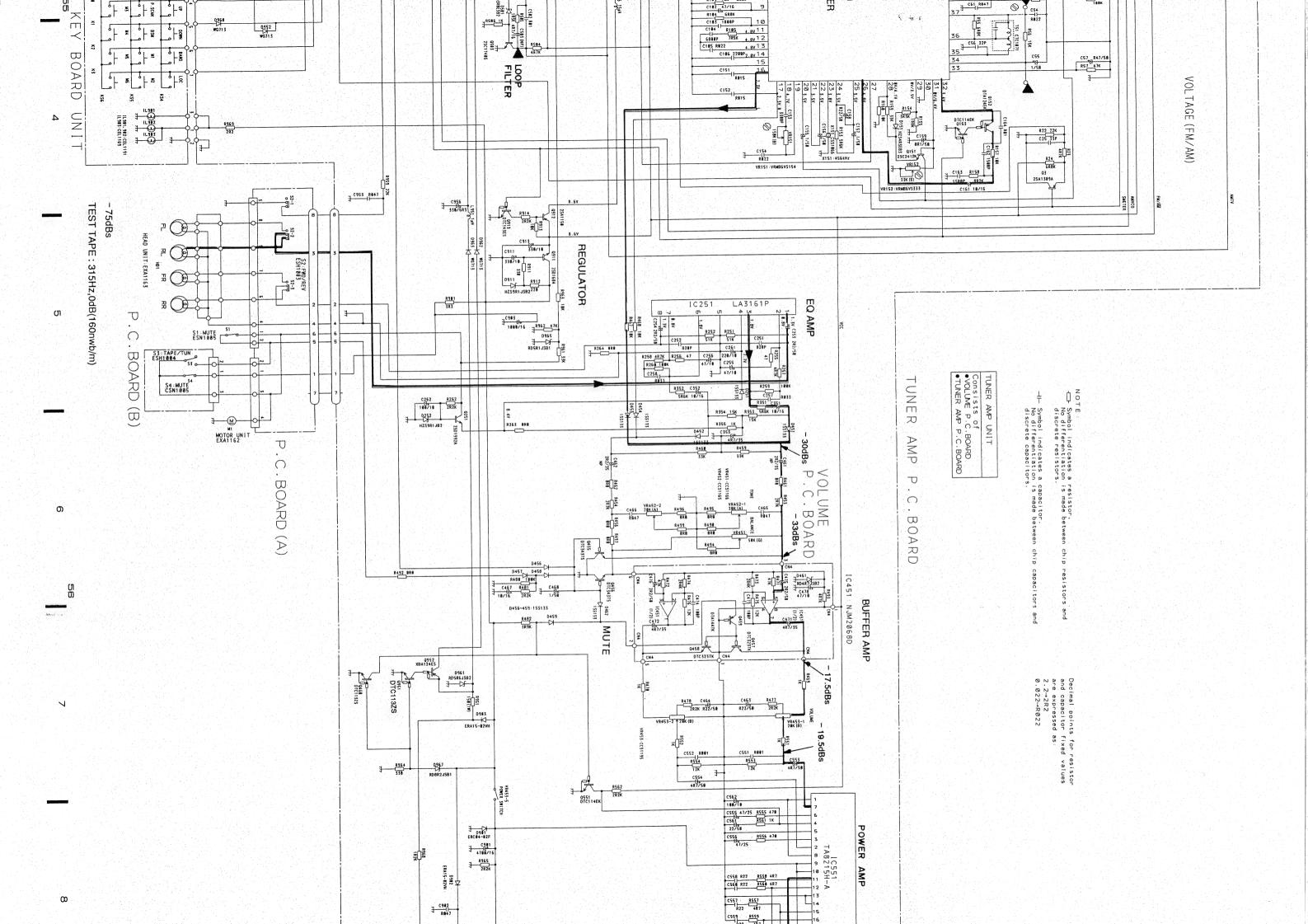
Q3 IC1 Q2 Q951 Q952 Q460

16. CONNECTION DIAGRAM (KEH-1250)

P.C. BOARD (A) P.C. BOARD (B)







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NOTE:

Symbol indicates a resistor.

No differentiation is made between discrete resistors. Symbol indicates a capacitor. No differentiation is made betwidiscrete capacitors.

TUNER AMP UNIT

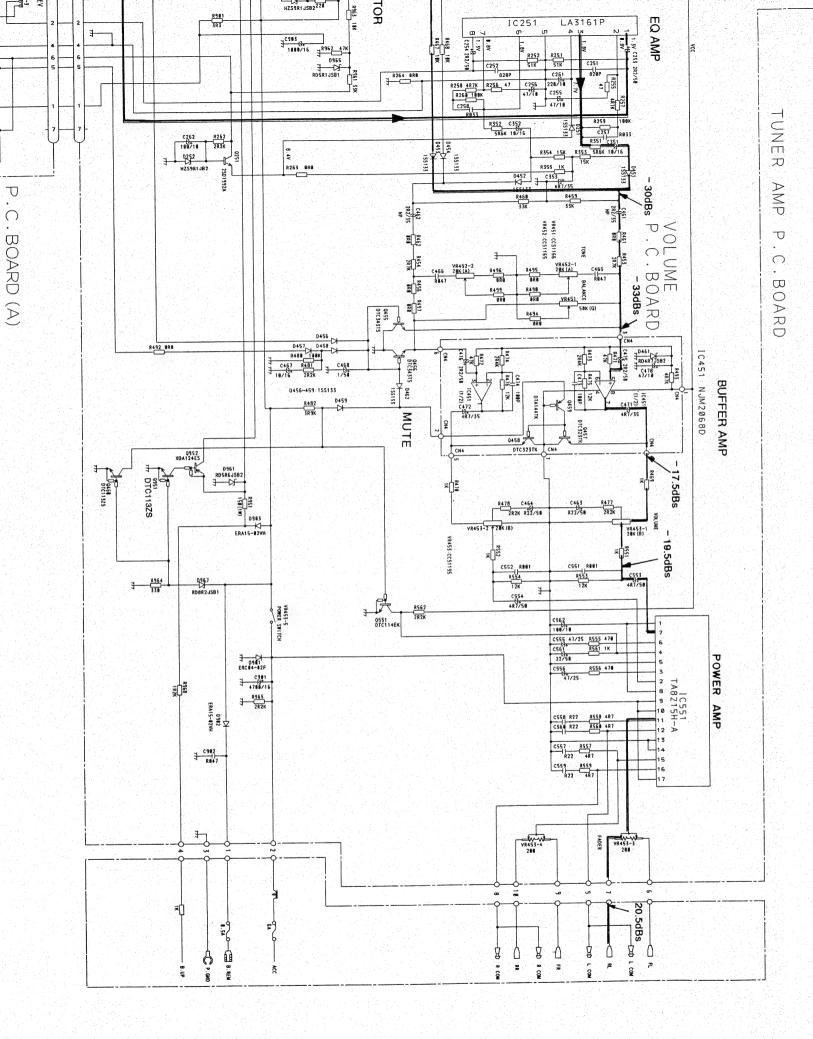
Consists of

VOLUME P.C.BOARD

TUNER AMP P.C.BOARD

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Fig. 19

lz,0dB(160nwb/m)

P.C.BOARD (B)

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S3: TAPE/TUN ESH1004

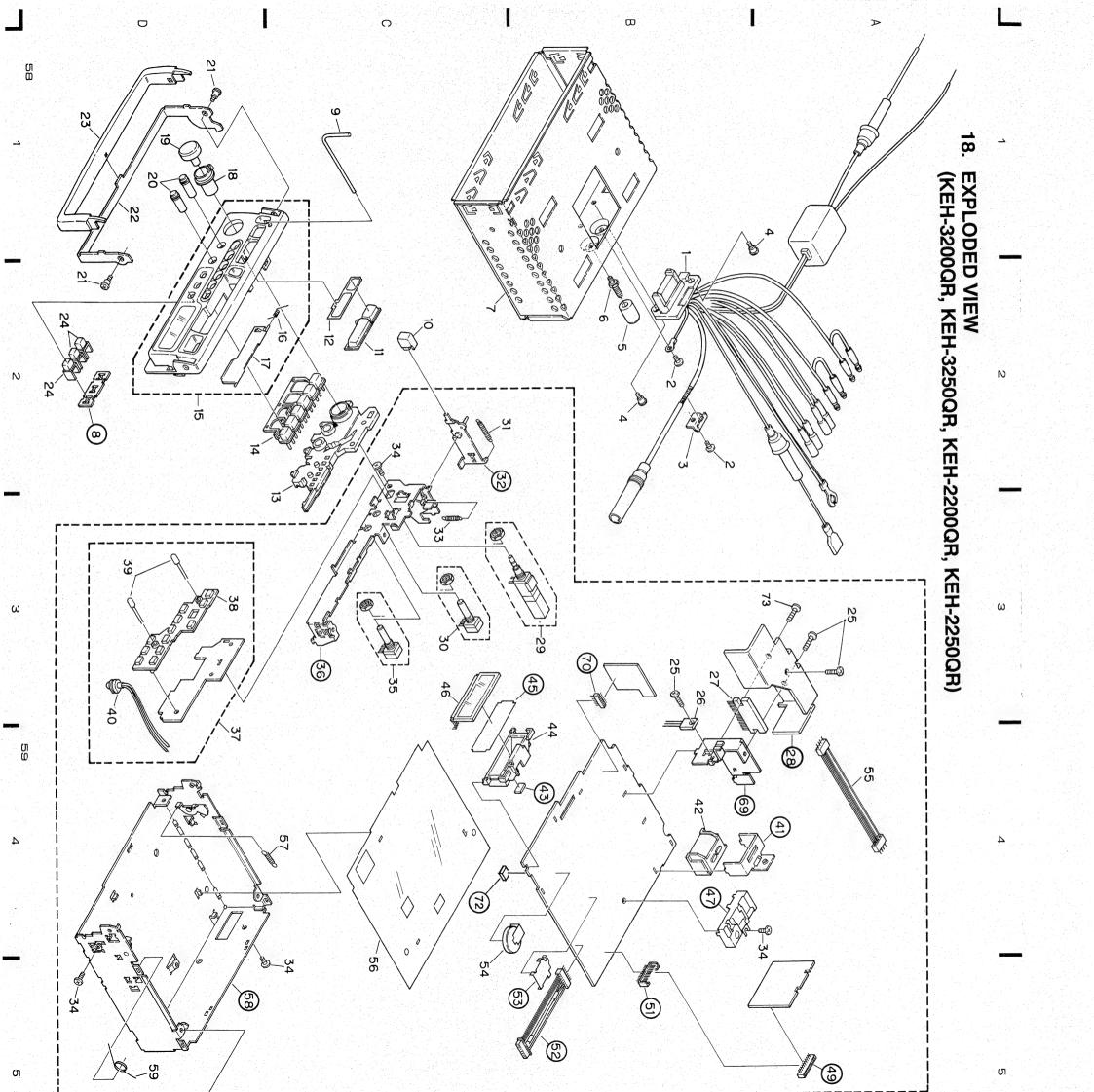
S4: MUTE CSN1005

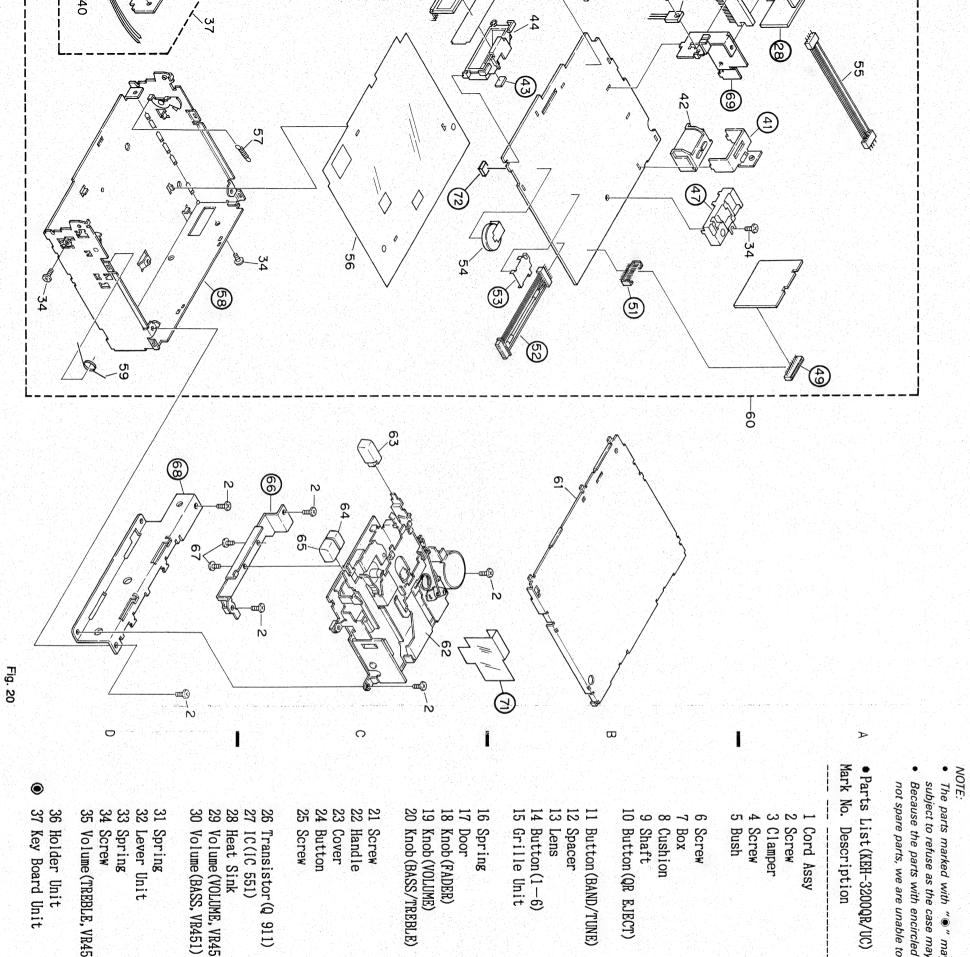
S1 MUTE S1 ESN1005

MOTOR UNIT

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The parts marked with "©" may need long time to supply an subject to refuse as the case may be.

Because the parts with encircled number shown on the disman not spare parts, we are unable to supply them in principle.

11 Button(BAND/TUNE) 12 Spacer 13 Lens 14 Button(1-6) 15 Grille Unit	6 Screw 7 Box 8 Cushion 9 Shaft 10 Button(QR EJECT)	1 Cord Assy 2 Screw 3 Clamper 4 Screw 5 Bush
CAC2544	CBA1002	CDE3432
CNM3275	CNB1553	BSZ30P060FMC
CNV3024	CNM3180	CNC2982
CAC2693	CLP1064	CBA1073
CXA4459	CAC2548	CNV1009

36 Holder Unit	31 Spring CBH1448 32 Lever Unit CXA4523 33 Spring CBH-846 34 Screw BSZ30PO 35 Volume(TREBLE, VR452)CCS1164	26 Transistor(Q 911) 2SD1684 27 IC(IC 551) TA8215H 28 Heat Sink CNC3896 29 Volume(VOLUME, VR453)CCS1193 30 Volume(BASS, VR451) CCS1164	21 Screw 22 Handle 23 Cover 24 Button 25 Screw
CXA3709	CBH1448 CXA4523 CBH-846 BSZ30P055FUC 452) CCS1164) 2SD1684 TA8215H-A CNC3896 453)CCS1193 1) CCS1164	CBA1165 CNC4007 CNV3022 CAC3097 BSZ30P120FMC

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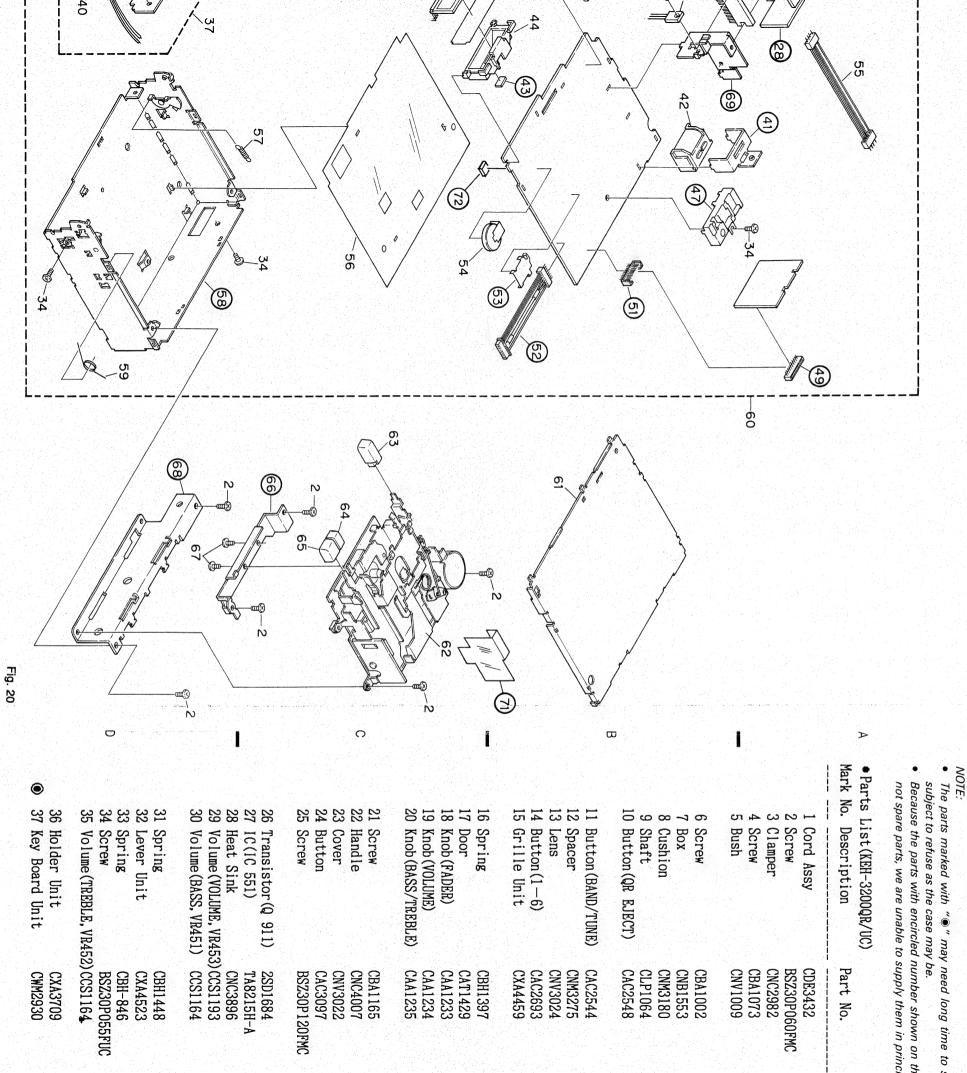
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CWM2930

CBH1397 CAT1429 CAA1233 CAA1234 CAA1235

Part No.

Mark N



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CXA3709 CWM2930

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The parts marked with "®" may need long time to supply an subject to refuse as the case may be.

Because the parts with encircled number shown on the disman not spare parts, we are unable to supply them in principle.

21 Screw 22 Handle 23 Cover 24 Button 25 Screw	16 Spring 17 Door 18 Knob (FADER) 19 Knob (VOLUME) 20 Knob (BASS/TREBLE)	11 Button(BAND/TUNE) 12 Spacer 13 Lens 14 Button(1-6) 15 Grille Unit	6 Screw 7 Box 8 Cushion 9 Shaft 10 Button(QR EJECT)	1 Cord Assy 2 Screw 3 Clamper 4 Screw 5 Bush	Mark No. Description
CBA1165 CNC4007 CNV3022 CAC3097 BSZ30P120FMC	CBH1397 CAT1429 CAA1233 CAA1234 CAA1235	CAC2544 CNM3275 CNV3024 CAC2693 CXA4459	CBA1002 CNB1553 CNM3180 CLP1064 CAC2548	CDE3432 BSZ30P060FMC CNC2982 CBA1073 CNV1009	Part No. Mark

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Fig. 20

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- NOTE:

 The parts marked with "@" may need long time to supply and their supply is subject to refuse as the case may be.

 Because the parts with encircled number shown on the dismantling drawing are not spare parts, we are unable to supply them in principle.

		C	D	
29 VOLUME (VOLUME, VK453) CCS1193 30 Volume (BASS, VR451) CCS1164 31 Spring 32 Lever Unit CXA4523 33 Spring 34 Screw 35 Volume (TREBLE, VR452) CCS1164 36 Holder Unit CXA3709 37 Key Board Unit CWM2930			8 Cushion 9 Shaft 10 Button(QR EJECT) 11 Button(BAND/TUNE) 12 Spacer 13 Lens 14 Button(1-6) 15 Grille Unit	• Parts List(KEH-3200QR/UC) Mark No. Description 1 Cord Assy 2 Screw 3 Clamper 4 Screw 5 Bush 6 Screw 7 Box
CCS1164 CCS1164 CBH1448 CXA4523 CBH-846 BSZ30P055FUC 2) CCS1164 CXA3709 CWM2930	CNV30ZZ CAC3097 BSZ30P120FMC 2SD1684 TA8215H-A CNC3896	CAT1429 CAA1233 CAA1234 CAA1235 CBA1165 CNC4007	CNM3180 CLP1064 CAC2548 CAC2544 CNM3275 CNW3275 CNV3024 CAC2693 CXA4459	Part No
65 Button(FF) 66 Bracket 67 Screw 68 Bracket 69 Holder 70 Plug 71 Insulator 72 Spacer 73 Screw	61 Case 62 Cassette Mechanism Assy 63 Button(EJECT) 64 Button(REW)	35 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	45 Plate 46 LCD 47 Case 48 ····· 49 Connector 50 ···· 51 Plug 52 Connector 53 Shield	Mark No. Description 38 Switch 39 Lamp(IL 901, 902) 40 Lamp(IL 903) 41 Holder 42 Connector 43 Spacer 44 Holder
CAC2546 CNC3265 BSZ26P060FMC CNC3264 CNC3897 CKS1616 CNM3036 CNM3036 CNN-625 BSZ30P100FMC	CNB1576 EXK1720 CAC2545 CAC2547	CEX1015 CDE3527 CNM3153 CBH1447 CXA4426 CBH1366	CNM3285 CAW1162 CNC3276 CKS1997 CKS1986 CDE2884 CNC3275	Part No. CNV2519 CEL1191 CEL1169 CNC3260 CNC3260 CKS1977 CNM2914 CNV2521



• The KEH-3250QR/ES, KEH-2200QR/UC and KEH-2250QR/ES Parts Lists enumerate the parts which differ from those enumerated in the KEH-3200QR/UC Parts List only. The parts other than those enumerated in the former are indentical with those in the latter, to which you are requested to refer, accordingly. The KEH-3200QR/UC Parts List is given on page 56.

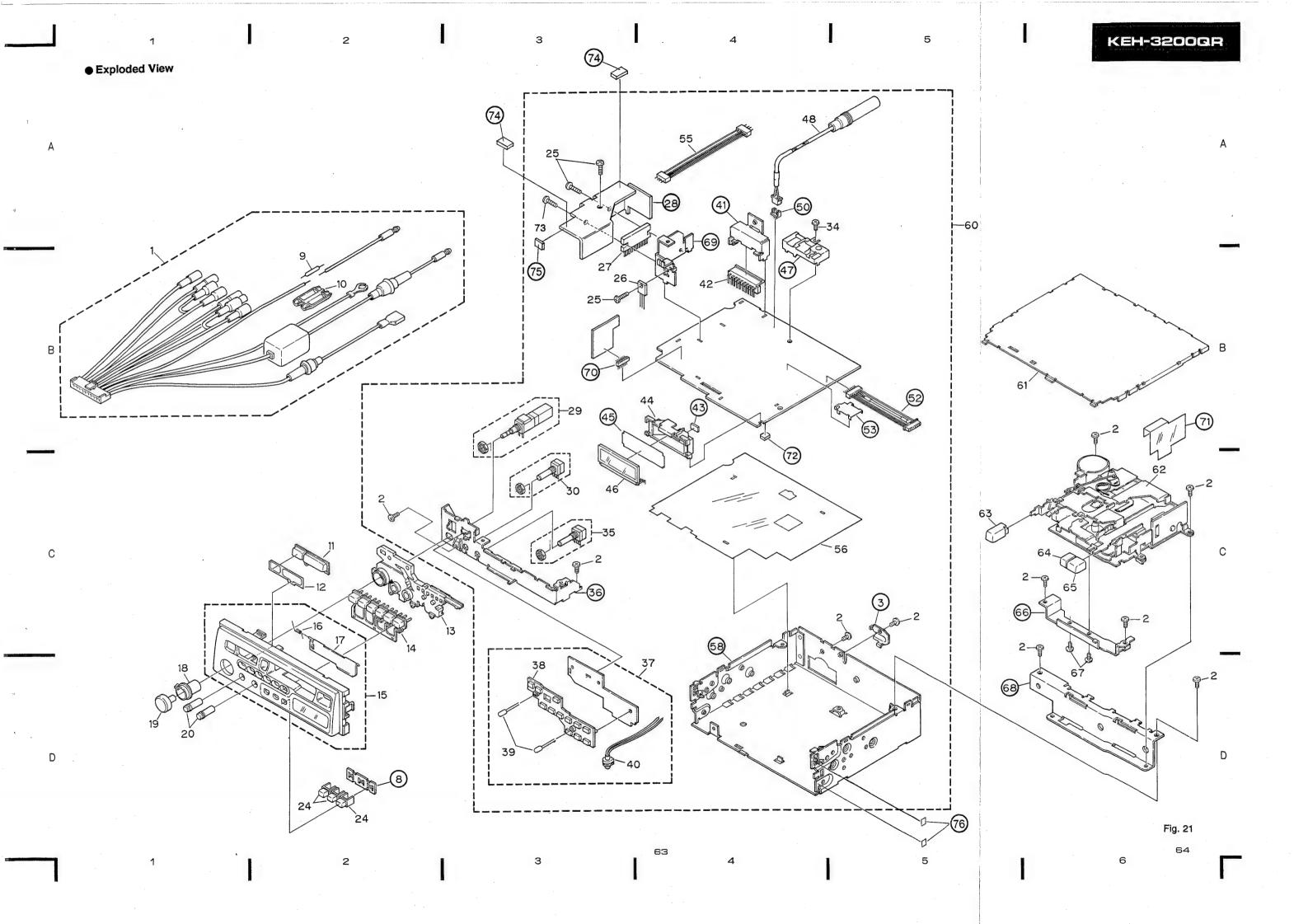
		KEH-3200QR/UC	KEH-3250QR/ES	KEH-2200QR/UC	KEH-2250QR/ES
Mark N	o. Description	Part No.	Part No.	Part No.	Part No.
TIGIT IV	14 Button(1-6)	CAC2693	CAC2692	CAC2670	CAC2670
	15 Grille Unit	CXA4459	CXA4460	CXA4464	CXA4465
	17 Door	CAT1429	CAT1404	CAT1429	CAT1404
	29 Volume (VOLUME, VR453	CCS1193	CCS1193	CCS1193	CCS1194
1	49 Connector	CKS1997	CKS1997	••••	
	51 Plug	CKS1986	CKS1986		
	52 Connector	CDE2884	CDE2884	CDE3064	CDE3064
•	60 Tuner Amp Assy	CWM2903	CWM2904	CWM2909	CWM2910
	61 Case	CNB1576	CNB1552	CNB1576	CNB1552
•	62 Cassette Mechanism	EXK1720	EXK1720	EXK1710	EXK1710
	Assy				



19. EXPLODED VIEW (KEH-1250)

• Parts List (KEH-1250/ES)

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
		Cord Assy	CDE3167		43	Spacer	CNMOO1 4
	2	Screw	BSZ30P060FMC			Holder	CNM2914
	3	Holder	CNC2913			Plate	CNV2521
	4-7	• • • •				LCD	CNM3285
	8	Cushion	CNM3180			· · · · · · · · · · · · · · · · · · ·	CAW1162
			OMIO100		41	Case	CNC3276
	9	Resistor	RS1/2P102JL		48	Antenna Cable	ODM 11 F
	10	Cap	CNS1472			····	CDH1115
	11	Button (BAND/TUNE)	CAC2544		-		
		Spacer	CNM3275			Plug	CKS1222
		Lens	CNV3024				
		20110	01113024		52	Connector	CDE3064
	14	Button $(1-6)$	CAC2670		۲ą	Shield	(NGCC==
	15	Grille Unit	CXA4466			onterd	CNC3275
	16	Spring	CBH1397				
		Door	CAT1404			Connector	CDE3527
		Knob (FADER)	CAA1233			Insulator	CNM3154
			UNI1233		57	• • • • •	
	19	Knob (VOLUME)	CAA1234		50	Chassis	(IV) 400 F
	20	Knob (TONE/BALANCE)	CAA1235				CNA1397
21-		••••	OMILLOO	•		* * * * *	
		Button	CAC3097	•	60	Tuner Amp Assy	CWM2911
		Screw		_		Case	CNB1588
	20	DCI CII	BSZ30P120FMC	•		Cassette Mechanism	EXK1710
	26	Transistor (Q 911)	2SD1684		1	Assy	
		IC(IC 551)					
		Heat Sink	TA8215H-A			Button (EJECT)	CAC2545
	20 1	Notine (VOLUME VDAE)	CNC3896			Button (REW)	CAC2547
	20 1	Volume (VOLUME, VR453			65 E	Button (FF)	CAC2546
	30	Volume(TONE, VR451)	CCS1166		66 E	Bracket	CNC3265
31~	.વવ ં	• • • •					
		Screw	DOZODDOZEDNO			crew	BSZ26P060FMC
			BSZ30P055FUC		68 B	racket	CNC3264
	00 I	/olume(BALANCE, VR45		.	69 H	older	CNC3897
		lolder	CNC3895		70 P	lug	CKS1616
•	37 K	Mey Board Unit	CWM2930			nsulator	CNM3036
	ეი ი		G.W.D.				
		Switch	CNV2519			pacer	CNN-625
		amp(IL 901, 902)	CEL1191		73 S	crew	BSZ30P100FMC
		amp(IL 903)	CEL1169	7	4 S1	pacer	CNM3356
		older	CNC4040	7	'5 S	pacer	CNM3357
4	42 C	onnector	CKS-467			pacer	CNM3358



• Parts List

Mark No. Descr	ription Part	No. Mark	No.	Description	Part No.
1 Reel	Unit EXA1	204	41	Spring	EBH1363
2 Gear					EXA1162
3 Washe					PMS26P025FUC
4 Gear	ENV1				CBA1054
				Gathering P.C. Board	
5 Gear	ENVI	203	40	dather mg r. c. board	FWX1000
6 Gear	ENV1				ESH1004
7 Gear	ENV1				CSN1005
8 Gear	ENV1	211			CBA1025
9 Sub (Chassis Unit EXA1	197	49		ENV1229
10 Arm	ENV1	210	50	Washer	CBF1038
11 Scre	a RM72	OPO25FMC	51	Belt	ENT1020
12 Spri					ENV1209
13 · · · ·	•	300			EXA1155
14					YE30FUC
•		000			
15 Shaf	t ELA1	200	55	Spring	EBH1310
16 Leve	r ENC1	269	56	Flywheel Unit	EXA1161
17 Wash	er EBF1	015	57	Belt	ENT1018
18 Gear	ENV1	208	58	Arm	ENV1206
19 Spri					EBH1317
20 Spri					ENV1205
ao opi i	ns Don't	002			
21 Leve	r ENC1	255	61	Chassis Unit	EXA1196
22 Spri	ng EBH1	359	62	Screw	JFZ20P025FNI
23 Wash	er YE25	FUC	63	Bracket	ENC1250
24 Spri	ng EBH1	358	64	Pulley	ENV1207
25				Solenoid	EXP1010
0C I	- DNO1	050	cc	Comorr	EBA1023
26 Leve				Screw	
27 Spri				Plug	CKS1055
28 Arm	ENC1			Gathering P.C. Board	
29 Spri	-			Switch	ESH1003
30 Wash	er YE19	SFUC	70	Washer	WH23FMC
31 Arm	Unit EXA:	1198		Screw	BSZ23P040FMC
32 Spri	ng EBH:	1374	72	Screw	CBA1015
33 Fram	ie ENC	1204	73	Head Unit	EXA1163
34 Arm	ENC	1263	74	P.C. Board	ENP1042
35			75	Switch	ESN1005
36 Hold	ler RNC	1257	78	Washer	YE20FUC
37 Spri		1364		Pinch Roller Unit	EXA1194
38 Leve		1222		Washer	YE12FUC
				Roller	ELA1247
		1203		Arm Unit	EXA1166
40 Tube	=		OL	NIM UNIC	DVUITOO

Mark	No.	Description	Part No.
	81	Screw	CBA1038
	82	Arm	ENV1227
	83	Spring	EBH1368
	84	Arm	ENC1266
	85	Spring	EBH1322
	86	Lever	ENC1228
	87	Spring	EBH1365
	88	Lever	ENC1229
	89	Arm Unit	EXA1158
	90	Pinch Roller Unit	EXA1193
	91	Spring	EBH1375
		Arm Unit	EXA1157
	93	Spring	EBH1345
	94	Collar	ELA1267

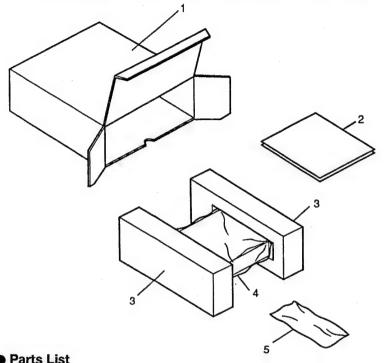
• Parts List

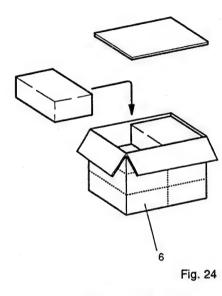
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Reel Unit	EXA1104		41	Spring	EBH1363
		Gear Unit	EXA1200			Motor Unit	EXA1162
		Washer	CBF1037			Screw	PMS26P025FUC
		Gear	ENV1230		_	Screw	CBA1054
			ENV1203			Gathering P.C. Board	
	b	Gear	ENVIZOS		40	dathering r.c. board	ENATOOS
		Gear	ENV1204			Switch	ESH1004
	7	Gear	ENV1273			Switch	CSN1005
	8	Gear	ENV1211		48	Screw	CBA1025
	9	Sub Chassis Unit	EXA1197		49	Gear	ENV1229
	10	Arm	ENV1210		50	Washer	CBF1038
	11	Screw	BMZ20P025FMC		51	Belt	ENT1020
		Spring	EBH1366	•	52	Gear	ENV1209
			20.1.000			Arm Unit	EXA1155
		••••				Washer	YE30FUC
		Shaft	ELA1266			Spring	EBH1310
	13	Silait	BURTZOO		UU	ph mg	EDMIOIO
	16	Lever	ENC1269		56	Flywheel Unit	EXA1161
	17	Washer	EBF1015		57	Belt	ENT1018
		Gear	ENV1208		58	Arm	ENV1206
		Spring	EBH1361			Spring	EBH1317
		Spring	EBH1362			Gear	ENV1205
	91	Lever	ENC1255		61	Chassis Unit	EXA1196
						Screw	JFZ20P025FNI
		Spring	EBH1359				Jr ZZUTUZDINI
		Washer	YE25FUC			D 11	TMU1 007
		Spring	EBH1358		_	Pulley	ENV1207
	25	••••			65	••••	
	26	Lever	ENC1256		66	••••	
	27	Spring	EBH1373		67	Plug	CKS1055
	28	Arm	ENC1248		68	Gathering P.C. Board	ENX1004
	29	Spring	EBH1308		69	Switch	ESH1003
		Washer	YE15FUC		70	Washer	WH23FMC
	31	Arm Unit	EXA1198		71	Screw	BSZ23P040FMC
	_	2 Spring	EBH1374			Screw	CBA1015
		Frame	ENC1204			Head Unit	EXA1163
		Arm	ENC1263			P.C. Board	ENP1042
		2	DNOTZOO			Switch	ESN1005
	0/	? Haldan	ENG10E		77	Washan	VEOUBIIO
		Holder	ENC1257			Washer	YE20FUC
		7 Spring	EBH1364			Pinch Roller Unit	EXA1194
		3 Lever	ENV1222			}	
		9 Head Base Unit	EXA1203				
	4	0 Tube			80) Arm	ENC1213

ark	No.	Description	Part No.
	81	Screw	CBA1038
	82	Arm	ENV1227
	83	Spring	EBH1368
		Arm	ENC1266
	85	Spring	EBH1365
	86	Lever	ENC1206
	87	Spring	EBH1365
		Lever	ENC1207
	89		
		Pinch Roller Unit	EXA1193
	91	••••	
	92	Arm	ENC1264
		Spring	EBH1367
		Collar	ELA1267

22. PACKING METHOD

22.1 KEH-3200QR, KEH-3250QR, KEH-2200QR, KEH-2250QR





Parts List

*: Non spare part

		KEH-3200QR/UC	KEH-3250QR/ES	KEH-2200QR/UC	KEH-2250QR/ES
Mark No.	Description	Part No.	Part No.	Part No.	Part No.
1	Carton	CHG2110	CHG2112	CHG2111	CHG2113
2-1	Owner's Manual	CRD1534	CRD1535	CRD1534	CRD1535
2-2	Owner's Manual	CRB1238	••••	CRB1238	
* 2-3	Card	ARY1048	CRY-062	ARY1048	CRY-062
3	Styrofoam	CHP1413	CHP1413	CHP1413	CHP1413
4	Cover	CEG1113	CEG1113	CEG1113	CEG1113
5	Accessory Assy	CEA1584	CEA1584	CEA1584	CEA1584
6	Contain Box	CHL2110	* CHL2112	CHL2111	* CHL2113
	i e		i .		1

5	Accessory Assy	CEA1584
Mark No.	Description	Part No.
5-1 5-2 5-3 5-4 5-5	Screw(×1) Screw(×1) Strap Bush Nut(×2)	CBA-102 CBA1002 CNF-111 CNV1009 NF50FMC
5-6 * 5-7	Shaft Polyethylene Bag	CLP1064 CEG1011

2-1 Owner's Manual

Part No.	Model	Language
CRD1534	KEH-3200QR/UC KEH-2200QR/UC	English, French
CRD1535	KEH-3250QR/ES KEH-2250QR/ES	English, French, Spanish, Arabic
CRB1238	KEH-3200QR/UC KEH-2200QR/UC	Spanish

22.2 KEH-1250

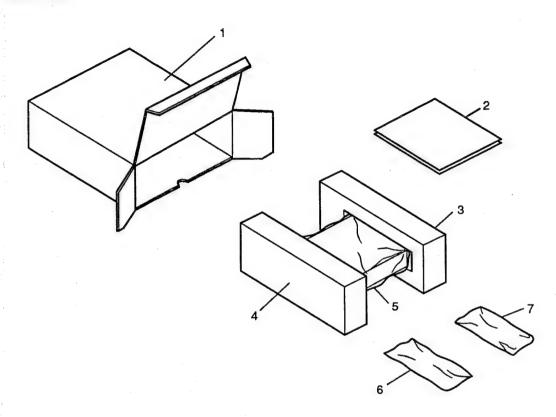


Fig. 25

Parts List

*: Non spare part

Mark	No.	Description	Part No.	Mar	rk No.	Description	Part No.
	2	Carton Owner's Manual (English, French, Spanish, Arabic) Styrofoam	CHG2114 CRD1536	*	6-2-2 6-2-3 6-2-4	Screw(×4) Screw(×4) Screw(×4) Screw(×1) Polyethylene Bag	BMZ40P080FMC BMZ50P080FMC CMZ50P080FMC HMF40P080FUC CEG-127
American Company of the Company of t	4 5 6 6-1	Styrofoam Cover Accessory Assy Cord Screw Assy	CHP1276 CEG1113 CEA1320 CDE1289 CEA1361	*	6-3	Polyethylene Bag Cord Assy	E36-615 CDE3167



23. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/8S□□□J,RS1/10S□□□J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

		=====	= Circ	cuit Sy	ymbol	& No.	Part Name	=====	Part No.
AVELL 2000 OD ALC VELL 2000 OD /ES		D 2	3	4	V	ariable	Capacitance	Diode	SVC203-AB
●KEH-3200QR/UC,KEH-3250QR/ES		D 5							MA157-MR
		D 151							HZS4R3EB3
Tuner Amp Unit			202	203					1SS133
Consists of Tuner Amp P.C.Board		D 205			٧	ariable	Capacitance	Diode	KV1235Z3
Volume P.C.Board		D 251							1SS133
Dolby NR P.C.Board		D 252							HZS9R1JB2
2012 1111		D 451	452	453	454	456 4	58 459 462		1SS133
Unit Number :		D 457							WG713
Unit Name :Tuner Amp Unit(KEH-3200QR/UC)		D 460							MA700
MISCELLANEOUS		D 461							RD4R7JSB2
MISCELLAITECCO		D 501							RD3R0ESB2
===== Circuit Symbol & No. Part Name ======	Part No	D 901							ERC04-02F
The state of the s		D 902							ERA15-02Y1
IC 1	LA1883M	D 954	956	957	958	959			WG713
IC 2	CWW1116								
IC 251	LA3161P	D 960	962	963					WG713
IC 301	CXA1102P	D 961							RD5R6JSB2
IC 401	AN6263N	D 964							MA700
IC 401	AITOZOSIT	D 965							RD5R1JSB2
10 454	NJM2068D	D 967							RD8R2JSB1
IC 451									
IC 551	TA8215H-A	L 1				Inc	ductor		CTF1065
IC 801	NJM2068D	L 2				Co			CTC1022
IC 951	PD4275	L 3				Co			CTC1020
Q 1	3SK195	L 4				Co			CTC1056
		L 5					SC Coil		CTC1024
Q 2	2SC2999						30 0011		0101024
Q 3	2SA1309A	L 6				Inc	ductor		LAU150K
Q 151	2SC2412K	L 201					rri-Inductor		LAU4R7K
Q 152	DTA124EK	L 202					rri-Inductor		LAU330K
Q 153	DTC114EK	L 202					rri-Inductor		
									CTF-161
Q 201	2SK435	L 951				re	rri-Inductor		LAU101K
Q 202	2SC1740S					•	••		0701001
Q 251	2SD1992A	T 1				Co			CTC1064
Q 301 401 402	XDC124ES	T 51				Co	• • •		CTC1071
Q 303 304 451 452 453 454	2SC1740S	T 201				Co			CTB1056
		T 202				Co			CTB1008
Q 455 456	DTC343TS	T 203	204			Co	lie		CTB1058
Q 457 458	DTC323TK								
Q 459	DTA144TK	T 205				Co			CTE1041
Q 460	DTC113ZS	T 206				Co			CTE1042
Q 502	2SK330	T 210				Co	oil		CTB1061
Q 502	20,1000	CF 1				Ce	ramic Filter		CTF-182
O 502 522	2SC1740S	CF 51	52			Ce	ramic Filter		CTF1130
Q 503 522	DTC114EK								
Q 551		CF201				Fil	ter		CTF1085
Q 801	DTA144EK	H 1					rge Protector		DSP-201M
Q 803 804	DTC323TK	X 151					ramic Resonal	tor	CSS1066
Q 911	2SD1684	X 951					ystal Resonato		CSS1077
		VR151					mi-fixed 150kg		VRMB6VS154
Q 912	2SA1150							- (-)	
Q 913	DTC143ES								
Q 951	DTC113ZS								
Q 952	XDA124ES							-	
D 1	1SV128A-BB								

KEH-3200QR

===== Circuit Symbol & No. Part Name =====	Part No.	Circuit Symbol & No. Part Name	Part No.
VR152 Semi-fixed 33kΩ(B)	VRMB6VS333	R 262	RS1/10S222J
VR301 302 Semi-fixed 33kΩ(B)	VRMB6HS333		RS1/8S0R0J
VR451 452 Volume 20kΩ(U)	CCS1164		RS1/10S0R0J
VR453 Volume/Switch 20kΩ(B),50kΩ(G),200Ω	CCS1193		RS1/10S433J
B 951 Battery	CEX1015		RD1/4PS433JL
LCD	CAW1162	R 305 306	RD1/4PS153JL
		R 307	RS1/10S473J
RESISTORS			RD1/4PS472JL
11201010110			RS1/10S221J
===== Circuit Symbol & No. Part Name ======	Part No.		RD1/4PS272JL
R 1 3 5	RS1/10S223J		RS1/10S332J
R 2	RD1/4PS151JL		RS1/10S104J
R 4 159	RS1/10S333J		RS1/10S822J
R 6	RD1/4PS473JL		RS1/10S684J
R 8 .	RS1/10S563J	R 404	RS1/10S510J
R 9	RD1/4PS563JL		RD1/4PS103JL
R 10 157 160	RS1/10S103J		RS1/10S0R0J
R 13	RD1/4PS271JL		RS1/10S473J
R 14	RS1/10S561J		RS1/10S331J
R 15	RS1/10S683J	R 455	RD1/4PS182JL
R 16	RS1/10S474J		RS1/10S182J
R 17	RS1/8S271J		RD1/4PS222JL
R 18 51	RS1/10S331J		RS1/10S222J
R 20 155	RS1/10S182J		RS1/10S333J
R 21	RS1/10S101J	R 461 462	RS1/10S474J
R 22	RS1/10S153J	R 463 464	RS1/8S122J
R 23	RD1/4PS223JL	R 467 468	RD1/4PS153JL
R 24	RD1/4PS682JL	R 469 470	RS1/10S102J
R 25	RS1/10S472J	R 471 472 475 476	RS1/10S123J
R 26	RD1/4PS103JL	R 473 474	RS1/10S332J
R 27	RS1/10S510J	R 480	RD1/4PS104JL
R 28 59	RS1/10S0R0J	R 481	RD1/4PS222JL
R 52	RD1/4PS333JL		RD1/4PS392JL
R 53	RD1/4PS104JL	R 483 484	RS1/10S561J
R 54	RD1/4PS123JL	R 487	RS1/10S0R0J
R 55 102 104	RS1/10S682J		RS1/10S563J
R 56	RD1/4PS562JL	R 490	RS1/10S0R0J
R 57	RS1/10S473J	R 491	RS1/10S273J
R 58	RS1/10S513J	R 492	RS1/8S0R0J
R 101	RS1/10S133J	R 493	RS1/10S472J
R 103	R\$1/10S183J	R 501 955 966	RD1/4PS472JL
R 105	RS1/10S752J		RD1/4PS102JL
R 153	RD1/4PS562JL		RS1/10S472J
R 154	RS1/10S332J		RD1/4PS152JL
R 156	RS1/10S684J		RS1/10S332J
R 158	RS1/10S822J	R 553 554	RS1/10S123J
R 201 202 211	RS1/10S103J		RS1/10S471J
R 203	RD1/4PS513JL		RD1/4PS4R7JL
R 204 219	RD1/4PS103JL		RS1/10S102J
R 205	RS1/10S561J		RD1/4PS222JL
R 210	RS1/10S473J	R 801 805 806	RS1/10S392J
R 220	RD1/4PS752JL	_	RS1/10S472J
R 221	RS1/10S104J		RS1/10S223J
R 222	RD1/4PS220JL		RS1/10S153J
R 223	RS1/10S472J		RS1/10S751J
R 224	RS1/10S0R0J	R 901	RD1/2PS3R3JL
R 251 252	RS1/10S513J		RD1/4PS331JL
R 255 256	RS1/10S470J		RD1/4PS221JL
R 257 258	RS1/10S472J		RS1/10S103J
R 259 260	RS1/10S104J		RS1/10S222J
11 203 200			

KEH-3200GR

===== Circuit Symbol & No. Part Name ======	Part No.	===== Circuit Symbol & No. Part Name =====	Part No.
		0.004	CEA3R3M50LS
R 951	RS1P151JL	C 224	CKSQYB473K25
R 953	RS1/10S331J	C 225 232 C 228	CEA220M16LS
R 956	RD1/4PS474JL RS1/10S223J	C 231	CQPA431G2A
R 959	RD1/4PS222JL	C 251 252	CKSQYB821K50
R 960			
R 961	RD1/4PS333JL	C 253 254	CEA2R2M50LS2
R 962	RD1/4PS473JL	C 255	CEA470M10LS CEA470M10L2
R 963	RD1/4PS103JL	C 256	CKSQYB333K50
R 967 R 969	RS1/10S0R0J RS1/10S2R2J	C 257 258 C 261	CEA221M10L2
R 970	RS1/8S0R0J	C 262	CEA101M10L2 CEA4R7M35LS
		C 301 302 303 304 C 305 306	CEAR68M50LS2
CAPACITORS		C 307 308	CEA101M10LS
===== Circuit Symbol & No. Part Name =====	Part No.	C 310	CEA100M16LS2
		C 211 212	CKSQYB223K50
C 1 3 56	CCSQCH220J50	C 311 312 C 401	CKSQYB103K50
C 2 53 58	CKSQYF473Z50		CCSQCH330J50
C 4 25	CCSQCH330J50	C 402 C 403	CEA330M10LS
C 5	CCSQTH090D50	C 404	CEAOR1M50LS2
C 6	CCSQTH070D50		
C 7	CKSQYB222K50	C 451 452 467 477	CEA100M16LS2
C 8 22 51 54 59 105 154	CKSQYB223K50	C 453 454	CEAOR1M50LS2
C 9	CCSQTH150J50	C 455 456	CEAR47M50LS2
C 10	CCSQSL271J50	C 457 458	CKSQYB153K50
C 11 19 101 164	CKSQYB103K50	C 459 460	CKSYB393K25
C 12 24	CCSQCH470J50	C 461 462	CEALNP2R2M35
C 12 24 C 13	CEA3R3M50LS	C 463 464	CEAR22M50L2
C 14	CKSQYB102K50	C 468	CEA010M50LS2
C 15	CCSQCH080D50	C 469 470	CCSQCH330J50
C 16	CCSQCH100D50	C 471 472	CEA4R7M35LS
C 17	CCSQCH330J50	C 473 474	CCSQCH101J50
		C 475 476	CEA2R2M50LS2
C 18	CCSQCH150J50	C 478	CEA470M10L2
C 20	CKSQYF104Z25	C 502	CKSQYB103K50
C 21	CKSYB393K25	C 503 4.7 μ F/16V	CCH1005
C 23	CKSYB393K25 CEA101M10LS		
C 27 52	CEATOTIMITOES	C 551 552	CKSQYB102K50
	CEA010M50LS2	C 553 554	CEHAQ4R7M50
C 55	CEAR47M50LS2	C 555 556	CEHAQ470M25
C 57	CKSYB473K50	C 557 558 559 560	CFTNA224J50
C 61	CEA470M16LS	C 561	CEHAQ220M50
C 102 C 103	CKSQYB182K50		CEUAO101M10
· ,		C 562	CEHAQ101M10
C 104	CKSQYB682K50	C 801 802	CEA2R2M50LS2
C 106	CKSQYB222K50	C 803	CEA470M10L2
C 151 152	CKSQYB223K50	C 805 806	CCSQCH101J50
C 153	CKSQYB332K50	C 807 808	CEA100M16LS2
C 155 156 157	CEA010M50LS2		APILL A 1771111
		C 901	CEHAQ472M16
C 158	CEAR22M50LS2	C 902	CKSQYF473Z50
C 159	CEAOR1M50LS2	C 903	CEA102M16L2
C 161	CEA100M16LS2	C 911 913 330 µF/10V	CCH1128
C 162 163	CKSQYB152K50	C 912	CEA101M10LS
C 201	CKSQYB103K50	C 951 952	CCSQCH100D50
	CKSQYB222K50	C 953	CKSQYF473Z50
C 202	CCSQCH220J50	C 954	CKSYB473K50
C 203	CKSQYB223K50	C 955	CKDYF223Z50
C 204 216 227 229 230	CKSQYF473Z50	C 956	CEA331M6R3L2
C 205 226	CEA470M16LS		
C 206		C 959	CKSYB223K50
C 207 209	CCSQTH090D50		
C 208	CCSQCH010C50		
C 217	CCSQRH820J50		
C 218	CCSQUJ180J50		
C 222	CEAR47M50LS2		

EH-3200GR

Unit Number : Unit Name : Key Board Unit

===== Circuit Symbol &No.PartName =====Part No.

IL 901 902 IL 903

Lamp14V40mA Lamp14V40mA

CEL1191

CEL1169

Unit Number : Unit Name : P.C.Board(A)

===== Circuit Symbol & No. Part Name ===== Part No. S 2 D 1 Switch(FWD/REV) ESH1003 1SR-35-100A

Unit Number : Unit Name : P.C.Board(B)

===== Circuit Symbol & No. Part Name ===== Part No.

S 3 S 4

Switch(TAPE/TUN) Switch(MUTE)

ESH1004 CSN1005

Miscellaneous Parts List

===== Circuit Symbol & No. Part Name ====== Part No. ESN1005

S 1 M 1 HD 1 Switch(MUTE) Motor Unit Head Unit SO 1 Solenoid

EXA1162 EXA1163 EXP1010

Tuner Amp Unit

	KEH-3200QR/UC	KEH-3250QR/ES
Circuit Symbol & No.	Part No.	Par tNo.
IC2	CWW1116	
D952,968		WG713
D954	WG713	
R22	RS1/10S153J	RS1/10S223J
R23	RD1/4PS223JL	RD1/4PS472JL
R56	RD1/4PS562JL	RD1/4PS153JL
R467,468	RD1/4PS153JL	RD1/4PS562JL
C151,152	CKSQYB223K50	CKSQYB153J50

KEH-3200QR

KEH-2200QR/UC,KEH-2250QR/ES		D 967		RD8R2JSB1
uner Amp Unit		L 1	Inductor	CTF1065
Descriptor of		L 2	Coil	CTC1022
Consists of Tuner Amp P.C.Board		L 3	Coil	CTC1020
Volume P.C.Board		L 4	Coil	CTC1056
Volume 1.5.50		.)]	000 0-8	CTC1024
		L 5	OSC Coil	CTC1024
		L 6	Inductor	LAU150K
nit Number :		L 201	Ferri-Inductor	LAU4R7K
nit Name : Tuner Amp Unit(KEH-2200QR/UC)		L 202	Ferri-Inductor	CTF-161
		L 203	Ferri-Inductor	O16-101
IISCELLANEOUS		L 951	Ferri-Inductor	LAU101K
Circuit Symbol & No. Part Name =====	Part No.	T 1	Coil	CTC1064
Circuit Symbol & No. Part Name		T 51	Coil	CTC1071
	LA1883M	T 201	Coil	CTB1056
C 1	LA3161P	T 202	Coil	CTB1008
C 251	NJM2068D			
C 451	TA8215H-A	T 203 204	Coil	CTB1058
C 551	NJM2068D	T 205	Coil	CTE1041
C 801	PD4275	T 206	Coil	CTE1042
C 951	1 57210	T 210	Coil	CTB1061
	3SK195	CF 1	Ceramic Filter	CTF-182
2 1	2SC2999			
2	2SA1309A	CF 51 52	Ceramic Filter	CTF1130
2 3	2SC2412K	CF201	Filter	CTF1085
2 151	DTA124EK	H 1	Surge Protector	DSP-201M
Q 152		X 151	Ceramic Resonator	CSS1066
0.450	DTC114EK	X 951	Crystal Resonator	CSS1077
Q 153	2SK435			
Q 201	2SC1740S	VR151	Semi-fixed 150k Ω (B)	VRMB6VS15
Q 202	2SD1992A	VR152	Semi-fixed 33kΩ(B)	VRMB6VS33
Q 251	2SC1740S	VR451 452	Volume 20kΩ(U)	CCS1164
Q 451 452		VR453 Volume/Switch	20kΩ(B),50kΩ(G),200Ω	CCS1193
0 450 454	2SC1740S	B 951	Battery	CEX1015
Q 453 454	DTC343TS			
Q 455 456	DTC323TK		LCD	CAW1162
Q 457 458				
	DTA144TK			
Q 459	DTA144TK DTC113ZS	RESISTORS		
Q 459	DTC113ZS		No. Dort Nome	Port No.
	DTC113ZS 2SK330	RESISTORS Circuit Symbol &	No. Part Name =====	Part No.
Q 459 Q 460	DTC113ZS 2SK330 2SC1740S	Circuit Symbol &	No. Part Name ======	
Q 459 Q 460 Q 502	DTC113ZS 2SK330 2SC1740S DTC114EK	R 1 3 5	No. Part Name ======	RS1/10S223
Q 459 Q 460 Q 502 Q 503 522	DTC113ZS 2SK330 2SC1740S DTC114EK DTA144EK	R 1 3 5	No. Part Name ======	RS1/10S223. RD1/4PS151
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801	DTC113ZS 2SK330 2SC1740S DTC114EK	R 1 3 5 R 2 R 4 159	No. Part Name ======	RS1/10S223 RD1/4PS151 RS1/10S333
Q 459 Q 460 Q 502 Q 503 522 Q 551	DTC113ZS 2SK330 2SC1740S DTC114EK DTA144EK DTC323TK	Circuit Symbol &	No. Part Name ====== 	RS1/10S223 RD1/4PS151 RS1/10S333 RD1/4PS473
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801	DTC113ZS 2SK330 2SC1740S DTC114EK DTA144EK DTC323TK 2SD1684	R 1 3 5 R 2 R 4 159	No. Part Name ======	RS1/10S223 RD1/4PS151 RS1/10S333
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804	2SK330 2SC1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150	R 1 3 5 R 2 R 4 159 R 6 R 8	No. Part Name	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563,
Q 459 Q 460 Q 502 Q 553 522 Q 551 Q 801 Q 803 804	DTC113ZS 2SK330 2SC1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES	R 1 3 5 R 2 R 4 159 R 6 R 8	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563,
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912	25K330 25C1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS	R 1 3 5 R 2 R 4 159 R 6 R 8 R 9 R 10 157 160	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913	DTC113ZS 2SK330 2SC1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES	Circuit Symbol & Symb	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951	25K330 25C1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES	Circuit Symbol & Symb	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271 RS1/10S561,
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952	25K330 25C1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES	Circuit Symbol & Symb	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952	2SK330 2SC1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB	R 1 3 5 R 2 R 4 159 R 6 R 8 R 9 R 10 157 160 R 13 R 14 R 15	No. Part Name ======	RS1/10S223. RD1/4PS151 RS1/10S333. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S103. RD1/4PS563 RS1/10S561. RS1/10S683.
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952	25K330 25C1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR	R 1 3 5 R 2 R 4 159 R 6 R 8 R 9 R 10 157 160 R 13 R 14 R 15 R 16	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271 RS1/10S683 RS1/10S683
Q 459 Q 460 Q 502 Q 503 S22 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151	25K330 25C1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271 RS1/10S683, RS1/10S683,
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5	25K330 25C1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271 RS1/10S683, RS1/10S474 RS1/8S271J RS1/10S331
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204	2SK330 2SC1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271 RS1/10S683, RS1/10S474, RS1/8S271J RS1/10S331, RS1/10S331,
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode	25K330 2SC1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563, RD1/4PS271 RS1/10S561, RS1/10S683 RS1/10S683 RS1/10S474 RS1/8S271J RS1/10S331, RS1/10S182 RS1/10S101
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 0 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251	25K330 2SC1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133	R 1 3 5 R 2 R 4 159 R 6 R 8 R 9 R 10 157 160 R 13 R 14 R 15 R 16 R 17 R 18 51 R 20 155 R 21	No. Part Name ======	RS1/10S223. RD1/4PS151 RS1/10S333. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S103 RD1/4PS271 RS1/10S683 RS1/10S683 RS1/10S683 RS1/10S474 RS1/8S271J RS1/10S331 RS1/10S182 RS1/10S101
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 251 D 252 911	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2	Circuit Symbol & Circui	No. Part Name	RS1/10S223, RD1/4PS151 RS1/10S323, RD1/4PS473 RS1/10S563, RD1/4PS563, RS1/10S561, RS1/10S561, RS1/10S683 RS1/10S683, RS1/10S331, RS1/10S331, RS1/10S182 RS1/10S101
Q 459 Q 460 Q 502 Q 503 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 D 151 D 205 Variable Capacitance Diode D 251 D 252 D 151 D 252 D 453 D 454 D 456 D 458 D 459 D 462	25K330 25C1740S DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133	Circuit Symbol & Circui	No. Part Name	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563, RS1/10S103, RD1/4PS271 RS1/10S683, RS1/10S683, RS1/10S63, RS1/10S122, RS1/10S1223, RS1/10S101
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 251 D 252 911	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223, RD1/4PS151 RS1/10S333, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271 RS1/10S683, RS1/10S474 RS1/8S271J RS1/10S331
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 452 453 454 456 458 459 462	25K330 2SC1740S DTC114EK DTA144EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133	Circuit Symbol & Circui	No. Part Name =====	RS1/10S223. RD1/4PS151 RS1/10S333. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S103. RD1/4PS271 RS1/10S683. RS1/10S474 RS1/8S271J RS1/10S331 RS1/10S182 RS1/10S182 RS1/10S182 RS1/10S474 RS1/8S271J RS1/10S474 RS1/8S271J RS1/10S474 RS1/8S271J RS1/10S474
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205	25K330 2SC1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223. RD1/4PS151 RS1/10S333. RD1/4PS563. RD1/4PS563. RD1/4PS563. RS1/10S103. RD1/4PS271 RS1/10S683. RS1/10S683. RS1/10S474. RS1/8S271J RS1/10S331. RS1/10S182. RS1/10S101
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 452 453 454 456 458 459 462 D 460 D 460 D 461	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2	Circuit Symbol & Circui	No. Part Name	RS1/10S223, RD1/4PS151 RS1/10S233, RD1/4PS473 RS1/10S563, RD1/4PS563 RS1/10S103, RD1/4PS271 RS1/10S683, RS1/10S683, RS1/10S693, RS1/10S182, RS1/10S182, RS1/10S192, RS1/10S223, RD1/4PS472, RD1/4PS472, RD1/4PS472, RD1/4PS103
Q 459 Q 460 Q 502 Q 503 S22 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 452 453 454 456 458 459 462 D 460 D 461 D 501	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2	Circuit Symbol & Circui	No. Part Name	RS1/10S223. RD1/4PS151 RS1/10S233. RD1/4PS473 RS1/10S563. RD1/4PS563. RD1/4PS271 RS1/10S561. RS1/10S683 RS1/10S474 RS1/8S271J RS1/10S331 RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS472 RD1/4PS682 RS1/10S472 RD1/4PS103
Q 459 Q 460 Q 502 Q 503 S22 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 251 D 252 911 D 451 452 453 454 456 458 459 462 D 460 D 461 D 501 D 901	25K330 25C1740S DTC114EK DTA144EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2 ERC04-02F	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223. RD1/4PS151 RS1/10S333. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S103. RD1/4PS271 RS1/10S683 RS1/10S101 RS1/10S474 RS1/8S271J RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS472 RD1/4PS682 RS1/10S472 RD1/4PS103
Q 459 Q 460 Q 502 Q 503 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 452 453 454 456 458 459 462 D 460 D 461 D 501	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2	Circuit Symbol & Circui	No. Part Name =====	RS1/10S223. RD1/4PS151 RS1/10S333. RD1/4PS473 RS1/10S333. RD1/4PS563 RS1/10S103. RD1/4PS271 RS1/10S683. RS1/10S474. RS1/8S271J RS1/10S474. RS1/8S271J RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS472 RD1/4PS682 RS1/10S474 RD1/4PS682 RS1/10S510 RS1/10S510 RS1/10S60R
Q 459 Q 460 Q 502 Q 503 522 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 452 453 454 456 458 459 462 D 460 D 460 D 461 D 501 D 901 D 902	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2 ERC04-02F ERA15-02Y1	Circuit Symbol & Circui	No. Part Name	RS1/10S223. RD1/4PS151 RS1/10S233. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S563. RD1/4PS563 RS1/10S683. RS1/10S683. RS1/10S474 RS1/8S271J RS1/10S331 RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S510 RS1/10S510 RS1/10S510 RS1/10S510
Q 459 Q 460 Q 502 Q 503 S51 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 452 453 454 456 458 459 462 D 460 D 461 D 501 D 901 D 902 D 954	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2 ERC04-02F ERA15-02Y1 WG713	Circuit Symbol & Circui	No. Part Name	RS1/10S223. RD1/4PS151 RS1/10S333. RD1/4PS473 RS1/10S333. RD1/4PS563 RS1/10S103. RD1/4PS271 RS1/10S683. RS1/10S474. RS1/8S271J RS1/10S474. RS1/8S271J RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS472 RD1/4PS682 RS1/10S474 RD1/4PS682 RS1/10S510 RS1/10S510 RS1/10S60R
Q 459 Q 460 Q 502 Q 503 S22 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 D 452 453 454 456 458 459 462 D 460 D 461 D 501 D 901 D 902 D 954 D 958 959 960 962 963	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2 ERC04-02F ERA15-02Y1 WG713 WG713	Circuit Symbol & Circui	No. Part Name	RS1/10S223. RD1/4PS151 RS1/10S233. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S563. RD1/4PS571 RS1/10S683. RS1/10S683. RS1/10S474 RS1/8S271J RS1/10S331 RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S510 RS1/10S510 RS1/10S510 RS1/10S510 RS1/10S9RC RD1/4PS333 RD1/4PS104
Q 459 Q 460 Q 502 Q 503 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 911 D 451 452 453 454 456 458 459 462 D 460 D 461 D 501 D 901 D 902 D 954 D 902 D 958 959 960 962 963 D 961	25K330 25C1740S DTC114EK DTA144EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2 ERC04-02F ERA15-02Y1 WG713 RD5R6JSB2	Circuit Symbol & Circui	No. Part Name	RS1/10S223. RD1/4PS151 RS1/10S233. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S563. RD1/4PS571 RS1/10S683. RS1/10S683. RS1/10S474 RS1/8S271J RS1/10S331 RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S510 RS1/10S510 RS1/10S510 RS1/10S510 RS1/10S9RC RD1/4PS333 RD1/4PS104
Q 459 Q 460 Q 502 Q 503 S22 Q 551 Q 801 Q 803 804 Q 911 Q 912 Q 913 Q 951 Q 952 D 1 D 2 3 4 Variable Capacitance Diode D 5 D 151 D 201 202 203 204 D 205 Variable Capacitance Diode D 251 D 252 P 11 D 451 D 452 D 457 D 460 D 461 D 501 D 901 D 902 D 954 D 958 P 959 P 960 P 62 P 63	25K330 25C1740S DTC114EK DTC114EK DTA144EK DTC323TK 2SD1684 2SA1150 DTC143ES DTC113ZS XDA124ES 1SV128A-BB SVC203-AB MA157-MR HZS4R3EB3 1SS133 KV1235Z3 1SS133 HZS9R1JB2 1SS133 1SS133 MA700 RD4R7JSB2 RD3R0ESB2 ERC04-02F ERA15-02Y1 WG713 WG713	Circuit Symbol & Circui	No. Part Name ======	RS1/10S223. RD1/4PS151 RS1/10S233. RD1/4PS473 RS1/10S563. RD1/4PS563 RS1/10S563. RD1/4PS571 RS1/10S683. RS1/10S683. RS1/10S474 RS1/8S271J RS1/10S331 RS1/10S182 RS1/10S101 RS1/10S223 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S472 RD1/4PS682 RS1/10S510 RS1/10S510 RS1/10S510 RS1/10S510 RS1/10S9RC RD1/4PS333 RD1/4PS104

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===== Circuit Syn	nbol & No. Part Name =====	Part No.		Circ	uit Syr	nbol	& No. Part	Name	 Part No.
R 55 102 104		RS1/10S682J	R 557	558	559	560			 RD1/4PS4R7JL
R 56		RD1/4PS562JL	R 561						RS1/10S102J
R 57		RS1/10S473J	R 562						RD1/4PS222JL
R 58		RS1/10S513J	R 801	805	806				RS1/10S392J
R 101		RS1/10S133J	R -802						RS1/10S472J
R 103		RS1/10S183J	R 803	804					RS1/10S223J
R 105		RS1/10S752J	R 807	808	811	812			RS1/10S153J
R 153		RD1/4PS562JL	R 809	810					RS1/10S751J
R 154		RS1/10S332J	R 901						RD1/2PS3R3JL
R 156		RS1/10S684J	R 911	964					RD1/4PS331JL
R 158		RS1/10S822J	R 912						RD1/4PS221JL
R 201 202 211		RS1/10S103J	R 913						RD1/10PS103J
R 203		RD1/4PS513JL	R 914	965					RS1/10S222J
R 204 219		RD1/4PS103JL	R 951						RS1P151JL
R 205		RS1/10S561J	R 953						RS1/10S331J
R 210		RS1/10S473J	R 956						RD1/4PS474JL
R 220		RD1/4PS752JL	R 959						RS1/10S223J
R 221		RS1/10S104J	R 960						RD1/4PS222JL
R 222		RD1/4PS220JL	R 961						RD1/4PS333JL
R 223		RS1/10S472J	R 962						RD1/4PS473JL
R 224		RS1/10S0R0J	R 963						RD1/4PS103JL
R 251 252		RS1/10S513J	R 967						RS1/10S0R0J
R 255 256		RS1/10S470J	R 969						RS1/10S2R2J
R 257 258		RS1/10S472J	R 970						RS1/8S0R0J
R 259 260		RS1/10S104J	CAPAC	TOP	c				
D 000		RS1/10S222J	CAPAC	HUN	3				
R 262 R 263		RS1/8S0R0J		-Circu	it Sv	mbol	& No.Part	Name	 Part No.
R 264		RS1/10S0R0J		-01100			d 140.7 tall	1401110	 rait No.
R 351 352 355		RD1/4PS102JL	C 1	3	56				CCSQCH220J50
R 353 354		RD1/4PS153JL	C 2						CKSQYF473Z50
11 000 001			C 4		•••				CCSQCH330J50
R 451 452 479		RS1/10S473J	C 5						CCSQTH090D50
R 453 454 465	466	RS1/10S331J	C 6						CCSQTH070D50
R 455		RD1/4PS182JL							
R 456		RS1/10S182J	C 7						CKSQYB222K50
R 457		RD1/4PS222JL	C 8	22	51	54	59 105 154	1	CKSQYB223K50
			C 9						CCSQTH150J50
R 458 477 478		RS1/10S222J	C 10						CCSQSL271J50
R 459 460		RS1/10S333J	C 11	19	101	164			CKSQYB103K50
R 461 462		RS1/10S474J	0 40						0000011470150
R 463 464		RS1/8S122J RD1/4PS153JL	C 12	24					CCSQCH470J50
R 467 468		ND1/4F31330L	C 13						CEA3R3M50LS
R 469 470		RS1/10S102J	C 15						CKSQYB102K50 CCSQCH080D50
R 471 472 475	476	RS1/10S123J							
R 473 474	47.0	RS1/10S332J	C 16						CCSQCH100D50 CCSQCH330J50
R 480		RD1/4PS104JL	0 17						CCGGCNGGGGG
R 481		RD1/4PS222JL	C 18						CCSQCH150J50
			C 20						CKSQYF104Z25
R 482		RD1/4PS392JL	C 21						CKSYB393K25
R 483 484		RS1/10S561J	C 27						CEA101M10LS
R 487		RS1/10S0R0J	C 55						CEA010M50LS2
R 489		RS1/10S563J							
R 490		RS1/10S0RW	C 57						CEAR47M50LS2
D 464		DC1/4000701	C 61						CKSYB473K50
R 491		RS1/10S273J	C 102						CEA470M16LS
R 492		RS1/8S0RQJ RS1/10S472J	C 103						CKSQYB182K50
R 493 R 501 955 966		RD1/4PS472JL	C 104						CKSQYB682K50
R 503 506		RD1/4PS102JL	C 106						CKEUNDOONED
11 000 000			C 106	152					CKSQYB222K50 CKSQYB223K50
R 504		RS1/10S472J	C 153	102					CKSQYB332K50
R 505		RD1/4PS152JL	C 155	156	157				CEA010M50LS2
R 551 552		RS1/10S332J	C 158	.00					CEAR22M50LS2
R 553 554		RS1/10S123J	0 100						OFI II INTINIOTOR
R 555 556		RS1/10S471J	C 159						CEAOR1M50LS2
			C 161						CEA100M16LS2
			C 162	163					CKSQYB152K50
			C 201						CKSQYB103K50
			C 202						CKSQYB222K50



===== Circuit Symbol & No. Part Name ======	Part No.	Unit Number : Unit Name : Key Boa	rd Unit	
203 204 216 227 229 230	CCSQCH220J50 CKSQYB223K50	===== Circuit Symbol		===== Part No.
205 226	CKSQYF473Z50 CEA470M16LS	IL 901 902	Lamp 14v40mA	CEL1191
206 207 209	CCSQTH090D50	IL 903	Lamp 14v40mA	CEL1169
208 217	CCSQCH010C50 CCSQRH820J50	Unit Number :		
218	CCSQUJ180J50	Unit Name : P.C.Boa	rd(A)	
222	CEAR47M50LS2	Circuit Comphal	9 No. Don't Name	D-4 N-
224	CEA3R3M50LS	Circuit Symbol		===== Part No.
225 232 228	CKSQYB473K25 CEA220M16LS	S 2	Switch(FWD/REV)	ESH1003
231	CQPA431G2A			
251 252	CKSQYB821K50	Unit Number :		
253 254	CEA2R2M50LS2	Unit Name : P.C.Boa	rd(B)	
255	CEA470M10LS	===== Circuit Symbol	& No. Part Name	===== Part No.
256 257 258	CEA470M10L2 CKSQYB333K50	S 3	Qwitch/TADE/TUR) EQUADA
261	CEA221M10L2	S 4	Switch(TAPE/TUN Switch(MUTE)	l) ESH1004 CSN1005
262	CEA101M10L2		O. HON (MOTE)	00141000
351 352	CEA100M16L2	Miscellaneous Parts Li	st	
353 451 452 467 477	CEA4R7M35L2 CEA100M16LS2	===== Circuit Symbol	& No. Part Name	===== Part No.
453 454	CEA0R1M50LS2	Orean Symbol		rail NO.
455 456	CEAR47M50LS2	S 1	Switch(MUTE)	ESN1005
457 458	CKSQYB153K50	M 1 HD 1	Motor Unit	EXA1162
459 460	CKSYB393K25	ו טוז	Head Unit	EXA1163
461 462	CEALNP2R2M35			
463 464	CEAR22M50L2	Tuner Amp Unit		
468	CEA010M50LS2		KEH-2200QR/UC	KEN SSENOR FO
471 472	CEA4R7M35LS		NETI-2200UN/UU	KEH-2250QR/ES
469 470	CCSQCH330J50	Circuit Symbol & No.	PartNo.	PartNo.
473 474 · · · · · · · · · · · · · · · · · ·	CCSQCH101J50 CEA2R2M50LS2	IC801	NJM2068D	
478	CEA470M10L2	Q453,454	2SC1740S	
		Q801	DTA144EK	
502	CKSQYB103K50	Q803,804	DTC323TK	WC712
503 4.7 μF/16V	CCH1005	D457	1SS133	WG713
551 552 553 554	CKSQYB102K50 CEHAQ4R7M50	D460	MA700	
555 556	CEHAQ470M25	D952,968		WG713
		VR453	CCS1193	CCS1194
557 558 559 560 561	CFTNA224J50 CEHAQ220M50			
562	CEHAQ101M10	DEC	DD4 // DCECC !!	DD4/4D0450.
801 802	CEA2R2M50LS2	R56 R467,468	RD1/4PS562JL RD1/4PS153JL	RD1/4PS153JL RD1/4PS562JL
803	CEA470M10L2	R489	RS1/10S563J	1101/47/33020E
805 806	CCSQCH101J50	R491	RS1/10S273J	
807 808	CEA100M16LS2	R801,805,806	RS1/10S392J	
901	CEHAQ472M16	R802	RS1/10S472J	
902 903	CKSQYF473Z50 CEA102M16L2	R803,804 R807,808,811,812	RS1/10S223J RS1/10S153J	
911 913 330 µF/10V 912	CCH1128 CEA101M10LS	R809,810	RS1/10S751J	
951 952	CCSQCH100D50	0454 450	01/00/2000/	01/00/17 1
953	CKSQYF473Z50	C151,152 C477	CKSQYB223K50 CEA100M16LS2	CKSQYB153K50
954	CKSYB473K50	C801,802	CEA2R2M50LS2	
955	CKDYF223Z50	C803	CEA470M10L2	
956	CEA331M6R3L2	C805,806	CCSQCH101J50	
959	CKSYB223K50	C807,808	CEA100M16LS2	

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●KEH-1250/ES	•	===== Circuit Symbol & No. Part Name ======	Part No.
Tuner Amp Unit			LAU4R7K LAU330K
			CTF-161
Consists of			LAU101K
Tuner Amp P.C.Board			CTC1064
Volume P.C.Board		T 1 Coil	0101004
		T 51 Coil	CTC1071
	•	• •	CTB1056
			CTB1008
Unit Number:			CTB1058
Unit Name : Tuner Amp Unit			CTE1041
		1 205	0121041
MISCELLANEOUS		T 206 Coil	CTE1042
Circuit Symbol & No. Part Name ======	Part No.		CTB1061
===== Circuit Symbol & No. Part Name ======	1 (11)	1 2.0	CTF-182
	LA1883M	• • • • • • • • • • • • • • • • • • • •	CTF1130
IC 1	LA3161P	• • • •	CTF1085
IC 251	NJM2068D	0,201	
IC 451	TA8215H-A	H 1 Surge Protector	DSP-201M
IC 551	PD4275		CSS1066
IC 951	FD42/3		CSS1077
	3SK195		VRMB6VS154
Q 1	2SC2999		VRMB6VS333
Q 2	2SA1309A	VIIIoz	
Q ·3	2SC2412K	VR451 Volume 20kΩ(A)	CCS1166
Q 151	DTA124EK		CCS1165
Q 152	DIAIZAER		CCS1195
	DTC114EK	LCD	CAW1162
Q 153	2SK435		
Q 201	2SC1740S	RESISTORS	
Q 202	2SD1992A	11201010110	
Q 251	DTC343TS	===== Circuit Symbol & No. Part Name ======	Part No.
Q 455 456	D1004010		
	DTC323TK	R 1 3 5	RS1/10S223J
Q 457 458	DTA144TK	R 2	RD1/4PS151JL
Q 459	DTC113ZS	R 4 159	RS1/10S333J
Q 460	2SK330	R 6	RD1/4PS473JL
Q 502	2SC1740S	R 8	RS1/10S563J
Q 503 522	23017400	n o	1101/1000000
	DTC114EK	R 9	RD1/4PS563JL
Q 551	2SD1684	R 10	RS1/10S823J
Q 911	2SA1150	R 13	RD1/4PS271JL
Q 912	DTC143ES	R 14	RS1/10S561J
Q 913	DTC113ZS	R 16	RS1/10S474J
Q 951	D1011020	n 10	1101/1004/40
	XDA124ES	D 47	RS1/8S271J
Q 952	1SV128A-BB	R 17	RS1/10S331J
D 1	SVC203-AB	R 18 51	RS1/10S182J
D 2 3 4 Variable Capacitance Diode		R 20 155	RS1/10S101J
D 5	MA157-MR	R 21	RS1/10S223J
D 151	HZS4R3EB3	R 22	NO 1/1002200
	100122	B 22	RD1/4PS472JL
D 201 202 203 204	1SS133	R 23	RD1/4PS682JL
D 205 Variable Capacitance Diode	KV1235Z3	R 24	RS1/10S472J
D 251	188133	R 25	RD1/4PS103JL
D 252 911	HZS9R1JB2	R 26	RS1/10S510J
D 451 452 453 454 456 457 458 459 462	1SS133	R 27	HO 1/1000100
	DD 407 1000	D 00 50	DC1/10C0D01
D 461	RD4R7JSB2	R 28 59	RS1/10S0R0J
D 501	RD3R0ESB2	R 52	RD1/4PS333JL
D 901	ERC04-02F	R 53	RD1/4PS104JL
D 902 903	ERA15-02VH	R 54	RD1/4PS123JL
D 952 968	WG713	R 55 102 104	RS1/10S682J
			DD4 (1D0150 "
D 958 959 960 962 963	WG713	R 56	RD1/4PS153JL
D 961	RD5R6JSB2	R 57	RS1/10S473J
D 965	RD5R1JSB2	R 58	RS1/10S513J
D 967	RD8R2JSB1	R 101	RS1/10S133J
L 1 Inductor	CTF1065	R 103	RS1/10S183J
	0704600	D 40F	DD4#007501
L 2 Coil	CTC1022	R 105	RS1/10S752J
L 3 Coil	CTC1020	R 153	RD1/4PS562JL
L 4 Coil	CTC1056	R 154	RS1/10S332J
L 5 OSC Coil	CTC1024	R 156	RS1/10S684J
L 6 Inductor	LAU150K	R 157 160 201 202 211	RS1/10S103J

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	DC4/40C000 I		===	Circ	uit Sv	mbol	& No).	Part Name	 Part No.
158	RS1/10S822J RD1/4PS513JL									
203	RD1/4PS103JL	С	1	3	56					CCSQCH220J5
204 219	RS1/10S561J	С	2	53	58					CKSQYF473Z5
205	RS1/10S473J	Č	4	25						CCSQCH330J5
210	1101/1004/00	č	5							CCSQTH090D
	RD1/4PS752JL	č	6							CCSQTH070D
220		•	U							
221	RS1/10S104J	_	7							CKSQYB222K
222	RD1/4PS22OJL	C	7	22	E4	EA	59	105	154	CKSQYB223K
223	RS1/10S472J	C	8	22	51	54	39	103	154	CCSQTH150J5
251 252	RS1/10S513J	C	9							CCSQSL271J5
	december.	С	10							
255 256	RS1/10S470J	С	11	19	101	164				CKSQYB103K
257 258	RS1/10S472J									00000014701
259 260	RS1/10S104J	С	12	24						CCSOCH470J
262	RS1/10S222J		13							CEA3R3M50LS
263	RS1/8S0R0J	С	14							CKSQYB102K
		С	15							CCSQCH080E
264	RS1/10S0R0J	С	16							CCSQCH100D
	RD1/4PS562JL	С	17							CCSQCH330J
351 352	RD1/4PS153JL									
353 354	RD1/4PS102JL	С	18							CCSQCH150J
355	RS1/10S272J	Č	20							CKSQYF104Z
453 454		č	21							CKSYB393K2
	RS1/10S0R0J	č	23							CKSYB223K2
456	RS1/10S0100	č	27	52						CEA101M10L
477 478	RS1/10S2333J	0	21	JE						
459 460	RS1/10S3S33	С	55							CEA101M50L
461 462										CEAR47M50L
467 468	RD1/4PS103JL	C	57							CKSYB473K5
	ma	C								CEA470M16L
469 470	RS1/10S102J		102						•	CKSQYB182K
471 472	RS1/10S473J	C	103							CNOCIDIOZN
473 474	RS1/10S242J									CKCONDCCO
475 476	RS1/10S123J		104							CKSQYB682K
479	RS1/10S473J	С	106							CKSQYB222K
		С	151	152						CKSQYB153K
480	RD1/4PS104JL	С	153							CKSQYB332K
481	RD1/4PS222JL	С	155	156	157	7				CEA010M50L
482	RD1/4PS392JL									
490	RS1/8S0R0J	С	158							CEAR22M50L
492	RS1/8S0R0J	С	159							CEAOR1M50L
1 402		С	161							CEA100M16L
493	RS1/10S472J	С	162	163	3					CKSQYB152k
494 495 496 497 499	RS1/10S0R0J	С	201							CKSQYB103k
3 501 955 966	RD1/4PS472JL									
3 503 506	RD1/4PS102JL	С	202							CKSQYB222H
	RS1/10S472J	С	203							CCSQCH220.
3 504					22	7 229	230			CKSQYB223H
	RD1/4PS152JL			226						CKSQYF473Z
3 505	RS1/10S102J		206							CEA470M16L
3 551 552	RS1/10S1020	v								
3 553 554	RS1/10S1230	_	יחכ:	209	•					CCSQTH090
R 555 556	RD1/4PS4R7JL		207		•					CCSQCH010
R 557 558 559 560	NUI/4FO4N/JL									CCSQRH820
	DO4/4004001		217							CCSQUJ180
R 561	RS1/10S102J		218							CEAR47M50I
3 562	RD1/4PS222JL	С	222							CEAR4/MOUL
3 901	RD1/2PS3R3JL									CEACHONICS
3 911 964	RD1/4PS331JL		224							CEA3R3M50I
3 912	RD1/4PS221JL			232	2					CKSQYB473I
			228							CEA220M16L
3 913	RS1/10S103J		231							CQPA431G2
R 914 965	RS1/10S222J	С	251	252	2					CKSQYB821I
R 951	RS1P151JL									
R 956	RD1/4PS474JL	C	253	254	4					CEA2R2M50I
	RS1/10S223J		255							CEA470M10L
R 959			256							CEA470M10L
D 000	RD1/4PS222JL			258	В					CKSQYB333I
R 960	RD1/4PS333JL		261							CEA221M10L
R 961	RD1/4PS473JL									
R 962	RD1/4PS103JL	_	261	,						CEA101M10L
R 963	RD1/4PS103JL		262		2					CEA100M16I
	RUDARSIZZAL	C	, JO	35	_					
R 968	1121741 012202	_		•						CEA4P7M25
	RS1/10S2R2J		350	3 1 46:	2					CEA4R7M35 CEALNP2R2



===== Circuit Symbol & No. Part Name ======	Part No.
C 465 466 C 467 C 468 C 471 472	CKSQYB473K25 CEA100M16LS2 CEA010M50LS2 CEA4R7M35LS
C 473 474	CCSQCH101J50
C 475 476 C 478 C 502 C 503 4.7 μF/16V C 551 552	CEA2R2M50LS2 CEA470M10L2 CKSQYB103K50 CCH1005 CKSQYB102K50
C 553 554 C 555 556 C 557 558 559 560 C 561 C 562	CEHAQ4R7M50 CEHAQ470M25 CFTNA224J50 CEHAQ220M50 CEHAQ101M10
C 901 C 902 C 903 C 911 913 330 μ F/10V C 912	CEHAQ472M16 CKSQYF473Z50 CEA102M16L2 CCH1128 CEA101M10LS
C 951 952 C 953 C 954 C 955 C 956	CCSQCH100D50 CKSQYF473Z50 CKSYB473K50 CKDYF223Z50 CEA331M6R3L2
C 959	CKSYB223K50
	Part No
	CEL1169
Unit Number : Unit Name : P.C.Board(A)	Part No.
Unit Name : P.C.Board(A)	
Unit Name : P.C.Board(A) ===== Circuit Symbol & No. Part Name ======	Part No. ESH1003
Unit Name : P.C.Board(A) ===== Circuit Symbol & No. Part Name ===== S 2 Switch(FWD/REV) Unit Number : Unit Name : P.C.Board(B) ===== Circuit Symbol & No. Part Name =====	ESH1003 Part No.
Unit Name : P.C.Board(A) ===== Circuit Symbol & No. Part Name ===== S 2 Switch(FWD/REV) Unit Number : Unit Name : P.C.Board(B) ===== Circuit Symbol & No. Part Name ===== S 3 Switch(TAPE/TUN)	ESH1003 Part No.
Unit Name : P.C.Board(A) ===== Circuit Symbol & No. Part Name ===== S 2 Switch(FWD/REV) Unit Number : Unit Name : P.C.Board(B) ===== Circuit Symbol & No. Part Name ===== S 3 Switch(TAPE/TUN)	Part No. ESH1004
Unit Name : P.C.Board(A) ===== Circuit Symbol & No. Part Name ===== S 2 Switch(FWD/REV) Unit Number : Unit Name : P.C.Board(B) ===== Circuit Symbol & No. Part Name ===== S 3 Switch(TAPE/TUN) S 4 Switch(MUTE)	Part No. ESH1004 CSN1005 Part No.